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LOS ANGELES AND CALIFORNIA A. V. A. CONVENTION HOSTS

By Z. M. SMITH, Secretary, A. V. A.

The A. V. A. Convention, to be held December 17, 19, 20, 1927, will find Los Angeles and the State of California to be an ideal host.

In the first place, the A. V. A. Convention is an invited guest, a guest that will be welcomed cordially. For several years the national vocational association has been importuned to accept the hospitality of California. Last December the long-standing invitation was accepted heartily.

In the next place, California and Los Angeles are capable of the role of genial host. Whole-souled, sincere, gracious, genuinely friendly, generous, lavishly sociable, energetic, capable in execution of plans, irrepressibly enthusiastic, and like descriptive terms are but examples of the limitations of language as a means of portraying subjective qualities of personality. Excessive as such expressions may seem to be they are in fact but weak attempts to portray the captivating, deeply abiding, soul-satisfying qualities of Californians.

In the third place, the A. V. A. wants to be the guest of romantic, historic, hospitable California. The A. V. A. will not be an unwilling guest. The visit is being planned for with pleasant anticipations. The delighted guest and the gracious host make an ideal situation—a situation that will become a reality when proponents of vocational education from all parts of America assemble in Convention in Los Angeles next December.

Fourthly, by all the tenets of social etiquette the A. V. A. is under obligation to reciprocate the courtesies California and other Western States have shown the Association by attending vocational education conventions in various sections of the United States. Americans in all sections of the continent now have an opportunity to demonstrate the genuineness of their friendship for California and her sister States and of their loyalty to the cause of vocational education by attending the Convention in Los Angeles.

Finally, the host has, even this early, made preparations for his A. V. A. guests. When the secretary of the A. V. A. attended meetings of the A. V. A. convention committee in Los Angeles on April 6, he was agreeably overwhelmed by reason of the thorough and extensive activities of the committee. This committee is composed of twenty-six men and women of Los Angeles and other regions of California. It is presided over by Mr. Ben F. Pearson, Manager of Personnel for the Southern California Edison Company. He is not a figure-head chairman. He gives freely of his time and contributes invaluable service to the committee. Dr. Edwin A. Lee, President of the A. V. A., is a member of the committee. Without one word of disparagement of the contributions of the other members of this highly capable committee, one is impressed with the fact that the masterly guidance of our worthy president is plainly evident in the work of the general convention committee. Space will not permit a personal reference to each member of the committee. We must be content with saying that under the direction of the general convention committee, its several members as chairmen of such sub-committees have worked out detailed plans for the general and sectional meeting places, for the main banquet and dance, for minor banquets, for installing the commercial-educational exhibits, for registration, for hotel accommodations, for publicity prior to and during the convention, for entertainment of wives and lady friends of delegates, for information service prior to and during the convention, for pleasure tours and other entertainment before and after the convention, and for financing the work of these various committees.

These several sub-committees submitted written reports to the general convention committee at the meeting held on April 6. The session continued throughout the day and was concluded in the evening with a banquet meeting which was attended by 361 enthusiastic, loyal boosters for the A. V. A. convention.

Friends of vocational education! The host to the A. V. A. convention for December 17, 19, 20, 1927, has opened wide his hospitable doors. No detail bearing on the comfort, pleasure, and benefit of his guests is being over-looked. His preparations are being made with a generous hand and a warm heart. We must not disappoint our host.

PROGRESS OF VOCATIONAL EDUCATION IN AMERICA

The aim of this Number of the NEWS BULLETIN is to present a general picture of the progress made in vocational education in America.

Forty-one States inaugurated their programs for vocational education by accepting the provisions of the Smith-Hugnes Act. The other seven States (Indiana, Massachusetts, Maine, New Jersey, New York, Pennsylvania, Wisconsin) enacted vocational education laws and developed vocational education programs prior to the passage of the Smith-Hughes Act. These seven States accepted the Smith-Hughes Law and continued the development of their vocational education programs in harmony with its provisions.

The number of units or school corporations reimbursed from Federal funds increased from 1,741 in 1918 to 7,930 in 1926. The enrollment in these federally aided units increased from 164,186 in 1918 to 752,150 in 1926.

NUMBER OF REIMBURSED UNITS AND THE ENROLLMENTS IN VOCATIONAL CLASSES FOR THE YEARS ENDED JUNE 30, 1918 AND 1926.

	Number of Reimbursed Units		Enrollments in Vocational Classes	
Agricultural Classes	1918	1926	1918	1926
All day	609	3,081	15,453	81,805
Part time	0	197	0	2,716
Short unit courses	0	264	0	5,331
Evening	0	829	0	19,000
Totals	609	4,371	15,453	108,852
Trade and Industrial				
All day	168	307	18,596	44,416
Evening	300	666	46,333	89,604
Part time—				
a. Trade extension	341	208	53,005	41,684
b. General continuation	0	572	0	290,358
Totals	809	1,753	117,934	466,152
Home Economics				
All day	200	1,023	8,439	41,563
Evening	123	670	22,360	101,305
Part time	0	113	0	34,278
Totals	323	1,806	30,799	177,146
GRAND TOTALS	1,741	7,930	164,186	752,150

The expenditures for vocational education amounted to $2,610,920.71 in 1918, and $20,951,476.70 in 1926. Slightly less than one fourth of the expenditures for 1918 was from Federal funds, and slightly more than one-fourth was from Federal funds in 1926. ($638,430.47 in 1918, and $5,511,-424.05 in 1926.)

In addition to the classes that were federally aided in 1926, several of the States maintained vocational instruction in numerous centers at State and local expense. The actual enrollment in vocational classes and the actual expenditures for vocational instruction were, therefore, in excess of the figures given in preceding paragraphs.

The expenditures for vocational teacher training amounted to $428,140.44 in 1918 and to $2,227,241.74 in 1926. Of these amounts $184,958.82 were from Federal funds in 1918, and $988,372.93 in 1926.

An important development that merits special attention is the growth of trade schools. The first of these trade schools in most instances were housed in old buildings. Within recent years several new trade school buildings have been constructed. Among these new buildings are the Frank Wiggins Trade School of Los Angeles, California, the El Paso Trade School, the Philadelphia Trade School for Girls, the Theodore Ahrens Trade School of Louisville, Kentucky, the Boston Trade School for Girls. Denver, Minneapolis, Fort Worth, San Antonio, Buffalo, Cleveland, Atlantic City, Newark, N. J., Bridgeport, Connecticut, Tampa, Miami, Lemon City and Montverde, Florida, Charleston, South Carolina, and Kansas City have constructed new trade schools.

The civilian vocational rehabilitation program inaugurated in 1921 has made steady progress. A total of 24,000 disabled persons have been refitted or retrained and more than 14,000 persons are in process of rehabilitation in the 39 States that have accepted the national civilian vocational rehabilitation act.

The reader's attention is directed to the following items from the States that sent in contributions. Immediately following these contributions from the States is an excellent report on the progress of vocational education in Canada.

ALABAMA

Progress of Vocational Work in Alabama for Period 1917-18 to 1926-27.

HOME MAKING EDUCATION

A day school program has been promoted in Alabama from the time Smith-Hughes Federal and State funds were available. This has been extended to include supervised home projects, employment of teachers for ten months in many instances, and the provision of a travel fund. A home improvement program is being carried on in nearly every community, as many as 58 such projects being under way in one community.

The evening school work has been developed both in cities and rural communities. Teacher training for evening schools is being carried on in the county in which the teacher-training work is located. Itinerant evening school teachers have been employed in two districts.

Teacher training has been enlarged to include practice teaching at a vocational school 20 miles from the teacher-training institution. Itinerant teacher trainers are employed for full-time from Alabama College and Tuskegee Institute.

The vocational home making program has brought about a change in teaching general home economics. Courses are no longer approved unless offered in double periods five times a week. Course content in all cases is vocational in type.

TRADES AND INDUSTRIAL EDUCATION

The all-day, evening, and part-time general continuation work in Alabama was begun in the year 1917-18, with a total of nine classes and an enrollment of 195. There has been a steady growth in all of these branches until at present there are 119 classes with an enrollment of 1,923. The part-time trade extension work shows an advance of the work begun in 1918-19.

The outstanding piece of work of later years is foreman training, conducted through groups organized in the industrial plants. In most cases conferences are held in the plants on company time. Summer conferences to which industrial companies send their men, with all expenses and salaries paid during the time of attendance, are conducted annually at the University of Alabama, the State's teacher-training institution for trades and industrial education.

Two men are employed in teacher training, one giving his entire time to itinerant teacher training, the other dividing his time equally between resident work and itinerant work, which includes the conducting of foreman conference groups.

A state trade school offering five trades has been established at Gadsden, Alabama. Well organized evening trade programs with local supervisors have been established at Birmingham, Mobile, Montgomery, Bessemer, Huntsville, and Albany, in addition to work being conducted at numerous small town centers. Birmingham is making plans for the remodeling of one of its centrally located high schools for use as a trade school. Work on this is expected to begin at once.

AGRICULTURAL EDUCATION

Development of the teaching of agriculture along vocational lines has increased from 13 departments of 26 classes in 1918, to 90 departments of 180 classes with 127 additional evening, part-time, and day-unit classes in 1927. Qualifications of teachers have been improved to where Alabama no longer has any teacher of vocational agriculture who has not completed a minimum of a four-year college course in vocational agriculture. Departments are housed in buildings constructed according to State approved plans with class room,

J. E. Webster, Alabama. Rehabilitated and able to earn a good wage.

iron and wood shop, and each department has a laboratory area with a minimum of one acre for class use.

The work has grown from an average enrollment for each department of 18 in 1918 to 49 in 1927. Several of the schools in Alabama have employed two agricultural teachers, and the State Board has placed in each of three of the schools an itinerant teacher who does part-time, evening and day-unit work in nearby schools and communities.

In 1926 the gross returns from the projects of enrolled pupils amounted to $773,151.12, with net returns of $442,500.97. The average gross returns per pupil enrolled is $299.55; the average net return $171.46.

REHABILITATION EDUCATION

The Rehabilitation Service began operations January 1, 1921, with one hundred fifteen registered cases to July 1. The State Supervisor and a part-time secretary constituted the personnel. By December, 1921, three hundred cases had been registered and a field agent was added to the staff to assist in the advisement, placement and supervision of training. Rehabilitation through training rather than through mere placement into employment has been stressed in our program.

By July, 1922, the work in the Birmingham district had grown to the extent where it required the full time of a field agent. Through a co-operative arrangement with the city school system a branch office was opened in Birmingham. This office is located in the School Administration Building, and is considered a unit of the city school system. In 1924 a similar arrangement was made with the School Board of Mobile County, and a full-time field agent was placed in charge of the Mobile district.

Since the beginning of the work approximately three thousand disabled persons have registered for service. In round numbers six hundred of these have been rehabilitated into employment, four hundred are now in process of rehabilitation, one thousand have been closed for various reasons, and one thousand are awaiting service. The latter classification includes a large number who are now in high school, some who are eligible but not yet physically able to begin training, and others whose eligibility has not been established.

STATEMENTS FROM LAYMEN

"Seven years ago, vocational agriculture was introduced in this community; vocational home economics a year later. At that time, general farming conditions were exceedingly poor. Very few homes were screened; many of the most fertile fields were washed into gullies; terraces were poorly made and uncultivated; the home orchards, home flocks and animals on the farm were poorly kept; and there were few good cows or other good stock.

Class in Brick Laying at Alabama School of Trades, Gadsden, Alabama. Other trades taught are: Printing, Linotype Operating, Electricity, Cabinet Making and Woodworking. This institution recently organized. Classes being taught in temporary buildings until the state building program can be made effective.

"Poultry flocks that were mixed and unprofitable have been replaced by pure bred chickens, properly fed and housed. Practically every farmer has at least one good brood sow.

"Worn out orchards have been made into vigorous, productive trees. Programs of soil improvement have been carried out. Seven years ago, it took from three to five acres of cotton to get a bale. Now the majority of people

are making from a bale to a bale and a half an acre. Corn yields have been increased likewise.

"Homes are being fixed up and beautified. This is due largely to the home improvement program carried on by the two vocational departments. The girls are learning to make their clothes; they have learned to cook, and do many other things that the housewife needs to know.

"Many of the farmers are now growing all of their feed crops, and making practically all of their living at home, cotton being a surplus crop. All of these practices have meant better farms, more successful farmers, and happier homes throughout this community."—(Excerpts from a letter written by G. E. Spruill, M. D., Ethelville, Alabama, to the State Director of Vocational Education of Alabama.)

"We have been very much gratified with the results obtained through the State Department of Education in the training of our young men. We have trained our apprentices for a number of years, but up until the time it was fostered by the State we confined our efforts to blue print reading and mechanical drawing. Under the leadership of your very able department we have materially broadened the scope of our educational program.

"At the present we have a class of apprentices taking mechanical drawing, blue print reading, mathematics and the sciences. We also have a night class of men who have completed their apprenticeship but who want to pursue further studies, and these men are instructed in elementary electricity and applied sciences, according to their desire. Also a night class under the supervision of our Machine Shop Foreman, which is devoted to studies in machine shop practice, is in operation.

In addition to the above, we have availed ourselves of the opportunity to have Prof. McKinley conduct weekly foreman conferences in our plant, from which we feel we obtained very substantial benefits."—(Excerpts from a letter written by W. D. Moore, President, American Cast Iron Pipe Company, Birmingham, to the State Director of Vocational Education of Alabama.)

"Since the employment in 1922 of a Field Agent of Industrial Rehabilitation, under a co-operative agreement between the State Board of Education and the Birmingham Board of Education, there have been many successful rehabilitations in this district. Those rehabilitated consist of adults with various handicaps as well as children of working age, many of whom were dependent upon others and who are now self-supporting. The work of rehabilitation has attracted the attention of the thoughtful people of Birmingham and has found a place in the economic and social life of this community.

"One of the most interesting cases of constructive work that has come under my immediate attention is that done in co-operation with the Alabama Association for the Blind. My understanding is that practically one hundred per cent of the employees of this institution have been handled through our rehabilitation agent. Certain it is that blind beggars are now an exception rather than a rule upon the streets of Birmingham.

"The Board of Education is highly pleased with the work being done in this department and will in the future, as in the past, continue to give it endorsement and encouragement."—C. B. Glenn, Superintendent of Birmingham Public Schools.

ARKANSAS

Progress in agricultural education in Arkansas is shown by the growth in number of schools and enrollment year by year since the work was introduced in 1918. The first year found 11 schools offering vocational agriculture with a combined enrollment of 135 students. The past year the work was carried in 117 centers with a combined enrollment of 3919. This gives an average annual increase of approximately 100 per cent each year over the beginning in 1918.

Since in each school offering agriculture there is a department in home-making, this phase of the vocational work has had its corresponding growth.

A successful vocational agriculture project in Arkansas.

An indication of the progress in trades and industries may be found in the million-dollar high school at Little Rock now nearing completion. This building will have shops equipped according to the latest and most approved plans for industrial education.

CALIFORNIA

Progress In Vocational Education from 1917 to 1927

By NICHOLAS RICCIARDI, Commissioner of Vocational Education

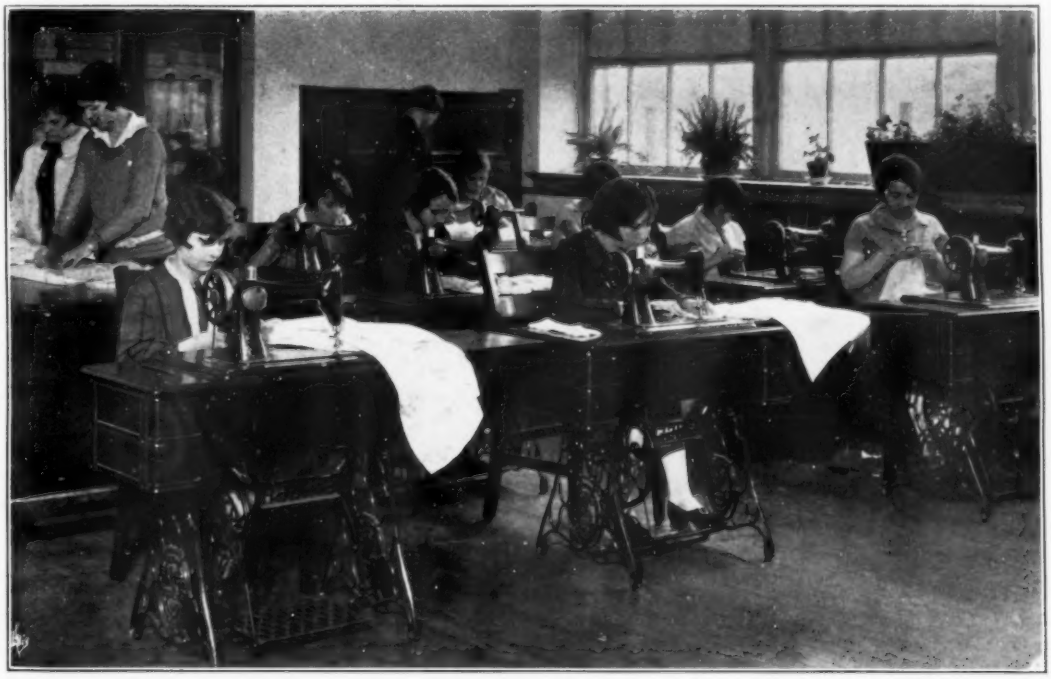
Vocational education of less-than-college grade is distinctly a secondary education program. The next step in the development of that program must be thought out in terms of the objectives of secondary education, the place of vocational education of less-than-college grade in a secondary education program, and the accomplishments to date in California.

Since the passage of the Smith-Hughes Act in February, 1917, very definite progress has been made in vocational education of less-than-college grade. In 1917 in California there was no organized vocational education program in any secondary school. There were manual training classes in the polytechnic schools, but no vocational classes devoting a full morning or a full afternoon every day to shop work, to agricultural projects, or to home economics work. There was no State plan for vocational education; no State Department of Vocational Education; no Division of Vocational Education at the State University; no plan for training specially qualified persons as vocational teachers; no special day vocational classes for adults; no apprentice training in cooperation with industrial plants endorsed by labor and industrial organizations; no craft advisory committees cooperating with the public schools; no part-time education for minors; no organized procedure for vocational counseling in secondary schools; no state or local supervisors for the various fields in vocational education; no placement service in cooperation with community agencies and the U. S. Junior Placement Service; no local supervisors of vocational education working in cooperation with the State Department of Vocational Education.

Today we have a State Plan of Vocational Education, based upon a sound philosophy of vocational education. We now have a special teacher-training program for men who have had practical experience in agriculture or in the trades, and for women who are experienced home-makers. Teacher-training is given by the Division of Vocational Education of

the State University in cooperation with the State Department of Vocational Education. Classes are held in Berkeley and in Los Angeles. Three of the State Teachers Colleges are giving special teacher-training courses to experienced home-makers who are planning to become home economics teachers. This means that today we have in California special agencies for the training of the kind of vocational teachers that are needed for vocational classes in agricultural, industrial and home economics education. In California today we have special day vocational classes for adults. We have apprentice training in cooperation with industrial plants receiving the hearty endorsement of labor and industrial organizations. Today we have craft advisory committees cooperating with the public schools in developing suitable training programs for the various vocations. We have part-time education classes for minors "to enhance the vocational efficiency and the civic intelligence" of those who are required to attend these classes. As a part of vocational education of secondary grade, we have an organized procedure for vocational counseling. We have a state supervisor for each of the three fields in vocational education for which federal grants are given—the agricultural, the industrial, and the home economics. Recently the State Board of Education unanimously passed a motion to the effect that in the next budget provision will be made for a state supervisor of commercial education. In the larger cities of the State, we have placement service in cooperation with community agencies and with the U. S. Junior Employment Service. We have also local supervisors of vocational education working in cooperation with the State Department of Vocational Education. Los Angeles now has one of the best trade schools in the country, known as the Frank Wiggins Trade School.

In 1917 there was no federal and state aided vocational work in our secondary schools. Now we have federal and state aided vocational work in forty-eight counties. In every instance the vocational program is under the jurisdiction of the high school. Vocational education of secondary grade in California is now state-wide in scope. From an initial enrollment of 1566 in 1917-18, the total enrollment last year, 1926, was 45,761. In 1917-18, the reimbursement for vocational classes conducted under the California Plan of Vocational Education amounted to $22,298.67. Last year, 1926, the total reimbursement was $370,561.46.



DELAWARE—Home Economics girls at Claymont High School, Delaware, seated at sewing machines. Sewing room is equipped with a long cutting table and as many machines as there are members in the class. This plan is based on the fact that women in their own homes sew at sewing machines rather that at tables, and that girls should be trained to form this habit.

DELAWARE

Development of Vocational Education in Delaware

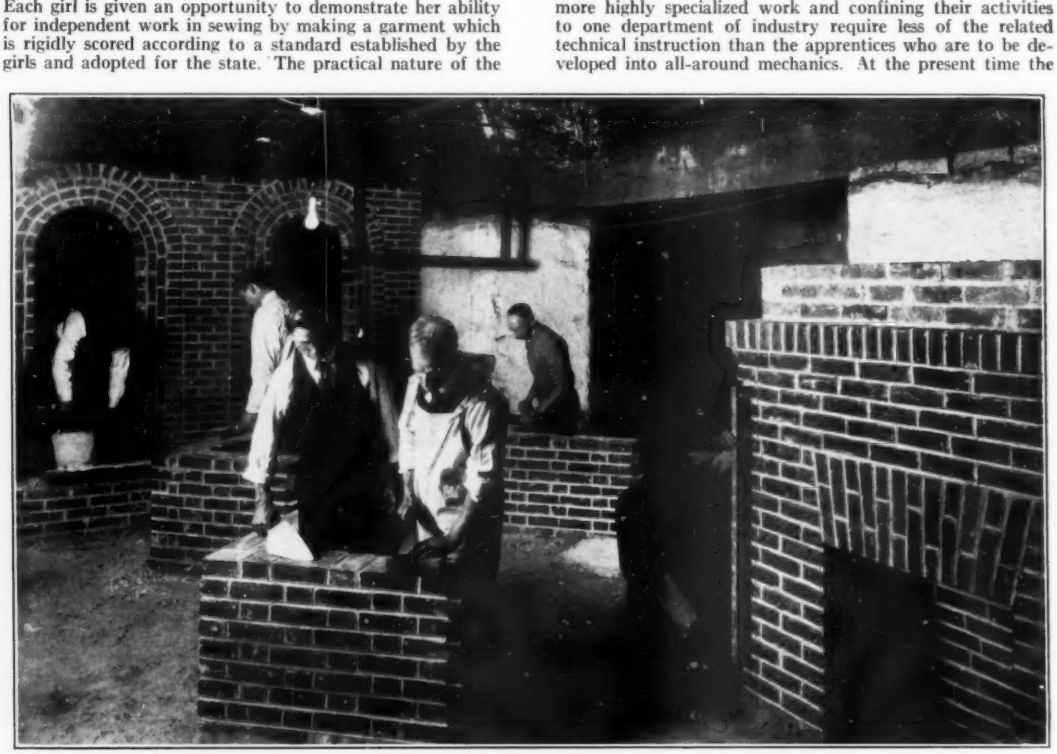
When in the fall of 1918, four Vocational Home Economics Departments were established in four of the Delaware High Schools, and 122 girls were enrolled for training in homemaking, a great deal of interest was focused on this introduction of home economics into the public school curriculum for the state. Ten years of the work have shown the justification for and the maintenance of this interest.

The enrollment in the home economics classes has increased five-fold during the ten years it has been offered in the schools. The number of Vocational Home Economics Departments has increased so that this year only one High School offering Home Economics is not meeting the standards for Federally-aided Departments. The classes in most of the schools are well housed, and the equipment is uniformly good, and sufficient for teaching the various phases of home-making. Plans are now being considered for rooms and equipment to be placed in several new school buildings.

The program of work for the home economics girls has been developed for the state as a two-year course. This pro-

gram includes units on the various activities which form the responsibilities of a home-maker. Enough skill in household tasks is developed in the classroom to enable the girls to know the pleasure of a task assumed and well done in their own homes. The economic and managerial sides of the work are stressed. Home Economics girls find an immediate need for their knowledge of nutrition in helping the underweight children in the grades to attain their correct weights through a nutrition program planned for twelve weeks. Part of the monthly grades is based on the home work which each member of a Home Economics class contracts for each month. Each girl is given an opportunity to demonstrate her ability for independent work in sewing by making a garment which is rigidly scored according to a standard established by the girls and adopted for the state. The practical nature of the course has been demonstrated frequently through community activities.

Ten years of opportunity to grow have opened up further possibilities for the development of Home Economics in Delaware, and the schools are eager and prepared for further growth.



DELAWARE—Apprentices receive instruction in the art of bricklaying in the Evening School of the Wilmington Trade School under Master Craftsmen.

PROGRESSIVE CHANGES IN INDUSTRIAL EDUCATION IN DELAWARE

The industrial education program received its impetus from the benefits of the Smith-Hughes Vocational Act made available in Delaware in 1918, and later by a donation by the Manufacturers' Association of Wilmington of about $30,000 in cash and equipment. Evening and part-time classes were organized in 1918 and in 1920 an all "day unit" class in machine shop was started. This class was, however, discontinued the following year and all the emphasis placed on evening and part-time instruction. The Part-time School Attendance Law for Delaware became operative in the fall of 1921. This law made it possible for pupils 14 to 16 years of age to go to work as soon as they had completed the sixth grade. This rather liberal provision had a tendency to build up a large continuation school group which reached its "peak" in 1923 when a ruling by the City Board of Education in Wilmington required all pupils to complete the eighth grade or be sixteen years of age before going to work. This provision reduced the enrollment about twenty per cent, but has occasioned no hardship on the pupils, since special cases can be excused by action of the Board.

There is an evident need in Wilmington for both the four-hour-a-week part-time and the cooperative half-time instruction for apprentices. The apprentices working on more highly specialized work and confining their activities to one department of industry require less of the related technical instruction than the apprentices who are to be developed into all-around mechanics. At the present time the cooperative part-time group is the largest, but indications are that the four-hour-a-week instruction for apprentices will develop more rapidly in the future.

A plan was inaugurated a year ago to have a trade advisory committee for each trade represented in the vocational program, and in addition to this a general advisory committee which should deal with problems of a general nature for the whole trade and industrial field. This plan is working very satisfactorily. The large aggregate membership of the several groups has the advantage of keeping more of those directly concerned with vocational training in close touch with the situation.

THE WILMINGTON TRADE SCHOOL

By G. L. COPPAGE, Production Manager
Pusey and Jones Co.

The Smith-Hughes law made provision for the development of Vocational Education through a Federal appropriation and the setting up of certain requirements deemed to be in the interest of Vocational Education. Since the Board of

Education was unable to meet these requirements the first year, the Manufacturers' Association, through its members and friends, gave about $30,000 in cash and equipment. The work was started by setting up a Vocational Department in the High School and it has grown steadily under efficient management until we now have an enrollment in the Evening School of 1,290 and an additional number of 601 in the part-time classes.

Because of the nature of the vocational work and the crowded conditions in the High School, it was found impossible to give adequate instruction in the trades which should be represented in our community. The Manufacturers' Section of the Chamber of Commerce, having sensed this condition, appointed a committee to meet with the Board of Education to devise a plan for improving the existing conditions. A survey was made and a scheme developed for using one of the abandoned school buildings for a new trade school. The building selected was well suited for this purpose. The plan was approved by the Board of Education and the new Wilmington Trade School was opened in September, 1926.

The scope of the trade instruction has been greatly increased both in the number of courses and in the service offered. One of the unique features of this school is the fact that all courses are organized on the individual instruction basis which allows students to enter any time and progress as rapidly as they can. Men, temporarily out of employment, or those lacking certain training, can come to school for individual and specialized instruction.

Youth comes to its chosen work at the trade school, clear eyed and enthusiastic, and when it brings skilled hands and trained minds, industry clearly recognizes its great value. When the young man thus equipped knocks at the door of industry he will be truly welcomed.

FROM A DELAWARE HOME-MAKER

I have always been interested in the education of boys and girls, and as a home-maker I have watched developments in the Home Economics Department of our local school with particular interest. As Secretary of our Local Board of Education, I have had an opportunity to visit our school frequently, and to see a number of groups of girls enter the Home Economics class with almost no ability in keeping house, and develop into girls who can assume responsibility for family meals, housecleaning, making dresses, entertaining guests and other home duties after they have completed the two-year course. It has been most interesting to see the girls progress from painstakingly laboring over the hem of a tea towel to planning, cutting and making a dress for themselves, in less than a year. I have also watched these same girls progress from the candy stage to the family dinner stage during their two-year course.

That other home-makers have been interested in and inspired by what our girls are accomplishing in Home Economics is evident from the reflection of the work in the club programs of the Delaware State Federation of Women's Clubs. It has been my privilege to watch the interest of mothers in what their daughters are doing. In many instances, where mothers had not had the opportunities for training in sewing, they have been keeping step with their daughters and have been sewing for their families.

The Vocational program in Delaware is reflected in the work of the Delaware State Women's Clubs very effectively. The High School girls in the Home Economics Departments have had charge of programs for Women's Clubs, demonstrating their class work and acting as hostesses to the club members with a graciousness and ease which has delighted us all, and have made our club Home Economics days among our most enjoyable occasions. We look to our Home Economics teachers for guidance in our home-making problems, and have yet to be disappointed in them.

The Vocational Education program has meant much to the home-makers of Delaware, and to our state.

MRS. JOHN D. MCCABE, President,
Delaware State Federation of Women's Clubs.

MARYLAND

Trade and Industrial Education in Maryland

By BENJAMIN T. LELAND, State Supervisor

Through the interest and activity in the field of trade and industrial education of the College of Education of the University of Maryland; Mr. B. J. Grimes, Superintendent of Schools of Washington County; Dr. John J. Rutledge, Chief Engineer, Bureau of Mines; Mr. Charles W. Sylvester, Director, Division of Vocational Education of Baltimore; and Mr. Edward B. Passano, President of Williams and Wilkins Publishing Company of Baltimore, the material for this report of progress has come into being.

The College of Education of the University of Maryland reports a large attendance upon the instruction given by the

Tailoring, Colored Vocational School, Baltimore, Maryland.

extension teacher training courses.

In order to meet the demand for these courses it will be necessary to add several part-time teachers to the teacher training staff in the fall of 1927.

Considerable interest is being manifested by a large group of teachers in meeting the requirements for the Bachelor of Science Degree in Industrial Education and also the requirements for the teachers' diploma awarded by the University.

A healthy growth in the interest on the part of industrial plants in the educational service rendered by the University in conducting conferences for the improvement of foremanship is noted.

The success of this work during the past year indicates that the demand for this service will be greater.

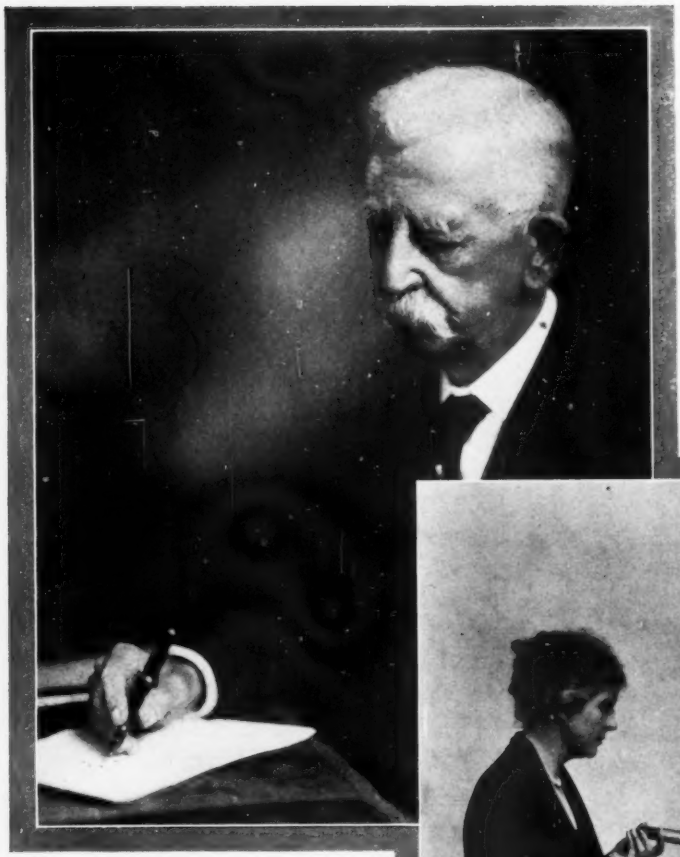
An industrial education experiment conducted under the auspices of the State Board of Vocational Education and the Washington County Board of Education was undertaken in the City of Hagerstown in the fall of 1926 for the purpose of determining the kinds of industrial education that could be successfully organized in a city of 35,000 with diversified industries.

The experiment was undertaken by the establishment of an industrial department in the new high school with an industrial education program to include day unit trade courses, part-time courses, and evening trade and technical courses.

The results of the past year indicate that the experiment will be a success.

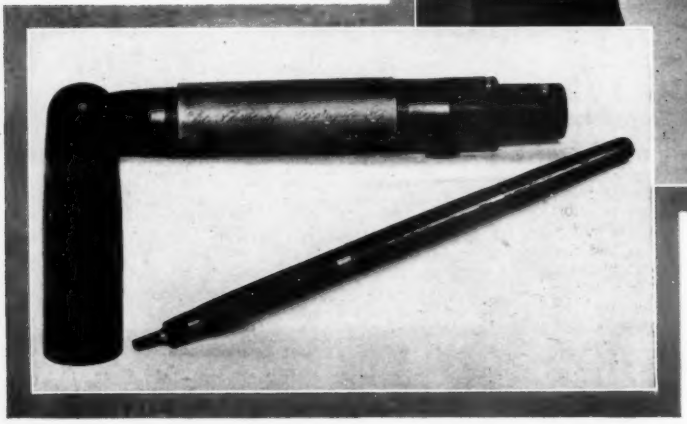
To meet the educational needs of working mine employees, night classes and summer schools have been conducted since 1923 by itinerant teachers.

The courses offered have been those that give a general knowledge of coal mining operations, and preparation for passing the state examination for certificates as mine foreman and fire boss. Advanced courses in application of electricity to mining work, the study of fuels, and the ge-



The late Dudley M. Hughes to whom Woodrow Wilson gave the pen that he used in signing the Smith-Hughes Act. Mr. Hughes, congressman from the 12th Congressional District of Georgia, was Chairman of the Committee on Education in 1917, and directed the passage of the Smith-Hughes Act through the House of Representatives.

Paul W. Chapman, State Director of Vocational Education in Georgia, presenting the pen used by Woodrow Wilson in signing the Smith-Hughes Act to Miss Ruth Blair, Georgia's State Historian. The presentation was made on the tenth anniversary of the signing of the Act.



The pen used by Woodrow Wilson in signing the Smith-Hughes Act showing the inscription on the silver plate which reads: "This pen was used by Woodrow Wilson in signing the Smith-Hughes Act, Feb. 23, 1917, and was presented to the State of Georgia by Hon. Dudley M. Hughes."

Pattern Making, Carroll Vocational School, Baltimore, Maryland.

Provincial Institute of Technology and Art, Calgary, Alberta. The Industrial Electricity Shop, Winter 1926-27.

ology of coal mining have been given during the past two years.

The enrollment and attendance of the classes indicates that the miners are deeply interested in securing information and instruction. Cases can be cited of men who have traveled long distances in bad weather to attend the evening classes, and of other men who worked on a night shift in order to attend the summer school which was conducted entirely during the day.

Items of progress noted in the City of Baltimore are: the tendency to raise the entrance requirements of vocational schools from sixth to eighth grade education; the enlargement of the number of courses offered at the vocational school for white girls, to include Hairdressing, Marcelling, Shampooing, and Manicuring, Lunchroom and Tea Room Service, Power Machine Operating, and Commercial Courses with specific vocational trends; the moving of the vocational school for white girls to a larger building equipped for the purpose; the opening of a vocational school for colored girls; the consideration of plans for the organization of courses in the Boys Vocational School which will provide instruction in the leading trades and occupations, and at the same time make it possible for those in attendance to secure sufficient work to entitle them to a high school diploma; the enlargement of the vocational school for colored boys and the providing of additional courses; the making of plans to extend the plan of voluntary continuation school education; and the consideration of more adequate housing, complete and modern equipment for the vocational schools, thus taking care of a rapidly increasing enrollment and placing the vocational schools on a par with the new high schools.

Mr. Edward B. Passano, President of the Waverly Press, Inc., of Baltimore, Maryland, in discussing the progress of Vocational Education in the printing trades, says:

"The problem of training apprentices for the printing industry of Baltimore has been solved by establishing the Ottmar Mergenthaler School of Printing as a part of the public school system.

"The affairs of the school are directed by an advisory board, the personnel of which is selected to represent the employers, employes (both union and non-union) and the Department of Education, all of which are appointed by the School Board.

"The Typothetae of Baltimore furnished the printing equipment (which is valued at approximately $70,000) and determines the course of study. The School Board furnished the building, and supplies the teachers. In other words, the industry assumed the responsibility of determining what is to be taught, and the mechanical equipment for the teaching, the School Board accepting as its part the teaching and the housing of the school.

"The school operates day classes, giving regular apprenticeship training, which develops into a part-time plan after the second year. The night classes are for continuation work for those operatives in the industry who desire special and intensive instruction. The day enrollment is about 80; the night enrollment nearly 200.

"The most important question for the future is to bring about a proper correlation and coordination between printing instruction in the elementary and junior high school and the regular course of instruction given in training school, in order that pre-apprenticeship training may be credited to the student who desires to enter the industry."

Girls Vocational School, Baltimore, Maryland.

THE CORRELATION OF THE HEALTH PROGRAM WITH VOCATIONAL HOME ECONOMICS

By ETHEL M. DIX, Pocomoke, Maryland

In one of Maryland's schools many of the interests and activities of the courses in Vocational Home Economics grow out of, or group themselves around the health program which is a distinctive feature of instruction in the Home Economics Department. It is the aim of this department to create within its students a thorough understanding of the principles of home-making and their related processes, and to develop to a high degree, skill in these processes. But, above all, it aims to arouse within each girl an appreciation of the fact that *home-making* is infinitely greater than

housekeeping. It aims to build up a wholesome attitude towards this high calling; to inspire the girl with the belief that the profession of home-making calls for the full development of woman's finest powers.

The basic principle of the courses in home-making is expressed in the motto of the Freshman Class: A happy home means a healthy home-maker. So every student of Home Economics begins in her Freshman year the study of herself. She learns her deficiencies and her requirements, and gradually, as the course progresses, she acquires an appreciation of the relation between physical fitness, the development of skills, and happiness and poise of mind and body.

One means by which she acquires this knowledge of herself, and this appreciation, is by keeping a chart of her weight. Each girl makes a graph—a picture of herself—which shows clearly the difference between her normal weight and her actual weight, as revealed by monthly weighings. With this record as a basis, her study of hygiene; of biology; of foods and their preparation; of nutrition; of clothing, all become vital, personal matters.

Retail Selling, Continuation Schools, Baltimore, Maryland.

With the development of her home projects,—for instance, in the planning and serving of family meals, the importance of "balance" and "wholesomeness" becomes more significant as her interest broadens to include all the members of her family group.

By the beginning of her senior year she is prepared to undertake a definite project in Child Study. She adopts a "Nutrition Subject," a little boy or girl of pre-school age. In addition to keeping a record of her own health condition as she has done for three years, she makes a chart of her subject's condition as revealed by monthly weighings. Besides, she becomes a companion for her subject, as far as possible; studying his needs, his habits, and his interests, learning meanwhile more about herself with each hour spent in his company.

This "unit" of vocational education also furnishes opportunity for the study of one or more texts dealing with Child Psychology. For instance, the class this year have gotten much benefit and pleasure from selected readings in The Child: His Nature and His Needs. They have also enjoyed Gruenbergs' Your Child: Today and Tomorrow, and Wholesome Childhood, by Groves.

Another unit of the vocational course in the senior year is that in Home Nursing, the regular A. R. C. Course. This is given under the supervision and with the assistance of a graduate nurse. This course furnishes indispensable training for those girls who expect to enter training schools for nurses after graduation from high school. In this way it is truly vocational. Many girls have gone out from this school to pursue with honor, courses in the best hospitals.

But its greatest value lies in the skill and confidence which it furnishes to the girl who in her own home will apply again and again, to meet the every-day needs of her own family group, its principles and processes. Not as a means of livelihood will this unit function in the experience of the greater number of girls, but as a means of assisting in that purpose for which home-making schools exist—the increased comfort and happiness of the home.

MASSACHUSETTS

A Sample of Excellent General Improvement Work in Compulsory Continuation Schools

VOCATIONAL AMERICANIZATION

By Mr. Walter H. Neaves, Employment Manager, W. F. Schrafft and Sons Corporation, Manufacturing Confectioners, Boston, Massachusetts

The W. F. Schrafft & Sons Corporation employs minors who are required by law to attend the Boston Continuation School a minimum of four hours each week. By cooperative arrangement with the Boston Continuation School this concern has established a cooperative school program in which on alternate weeks a class opportunity in regularly approved household arts work is offered at the High School of Practical Arts, Boston, and employment at the Candy Factory. Employees (Continuation School Girls) who have reached high school grade are eligible.

A high school diploma is granted on the completion of the regular four-year program. Credit is given for previous high school experience. This program will probably require five years for completion on the cooperative plan in the instance of the pupil who had never attended high school.

Those of us who see communistic ideas creeping into American homes and American industries must realize that there need be little fear if our present standards of education be maintained or improved.

At "Schrafft's" we have known for many years that ignorance and filth, disorder and radicalism, and turmoil and unhappiness work harmoniously to put us out of business and our people out of work; but that education and cleanliness, education and happiness, and education and Americanism combine much more harmoniously to make us a successful organization and to give those who work here an American living.

The plan of establishing a half-time cooperative class of girls came to us from the Boston School Department two years ago. We have, now, about two hundred girls in the classes; and every new employee for about a year has come to work on this "half-time school" basis. We made only two requests; first, that there be no instruction connected directly with the confectionery industry; secondly, that the girls be taught to be real Americans.

Two hundred girls who had definitely left school have been returned for at least one more year. That they are "making good" as workers is proven by the request of the department heads for "only half-time girls." We believe they will be just as successful as citizens.

The Weymouth Co-operative Part-time School of Shoemaking

By Mr. Stanley Heald, Factory Superintendent, Stetson Shoe Company, Weymouth, Massachusetts

By cooperative arrangement with the Weymouth Independent Industrial School, the Stetson Shoe Company has established an extension part-time school in shoemaking in which on alternate weeks under a co-ordinator director the class opportunity is presented at the Weymouth High

School, and the shop opportunity at the factory of the company.

Vocational Training

By STANLEY HEALD

Vocational training for our young people is the logical conclusion of our present school system. Our industries need intelligent young men as well as our professions, and if a youth can decide early in life what he wishes to make his livelihood there is no reason why our public schools should not assist him to this end.

The division of labor is so great in the shoe industry that it is impossible for the young man to receive his training at home as he did frequently when his father could sit down and make the entire shoe. Modern machinery becoming more and more automatic precludes any possibility of a youngster learning his trade at home.

The theory that all should receive a higher education is all well and good for those who can apply their learning and succeed, but the successes are not so great in number. Schools are becoming overcrowded as well as colleges, and this being the case, the young man who can choose his vocation at the age of fifteen, and continue his education at the same time, is doing a great deal to equip himself for the better things in industry with a fine opportunity to be able to advance into the field of foremanship and other executive positions.

Why should not the shoe industry, which is one of the two largest industries in New England and the largest in Weymouth, expect to draw her future man power from the schools? We believe if a satisfactory course can be adopted there is no reason why the young men, the town and the industry should not benefit by vocational training because of the deeper interest and higher intellect of the youth who shall take advantage of the training. The proper time to help the young man is when he is developing, and as this age begins when he is about fifteen, he has plenty of time to study and learn about the things which he will pursue in later life. The tendency for youth is to find employment in their home town if possible, and therefore the public schools should use their influence in helping them to find it.

The shoe manufacturers of Weymouth are proud of the very high type of people who work with them, and are very anxious to retain this same quality. If we do nothing to influence the youth of the town to take up shoemaking we will soon have to rely upon other towns and districts for our material. Why should not the men and women of the future in our town have the thousands of dollars of wages which will be paid instead of allowing it to pass into outside hands? *The work which needs to be carried on is that of making the young people enthusiastic about their home industry.*

Fitting Department, Lynn, Mass., Shoemaking School.

In vocational training we see another distinct advantage: Many parents find it necessary to have their children go to work at the earliest opportunity. Under the new scheme of things the youngster cannot only go to work and help provide for the family budget, but he can also follow the course of his own ambitions, and study at the same time, so that when the time comes for his actually going to work he will be fitted far better for helping his parents than he would have been if he had left school altogether.

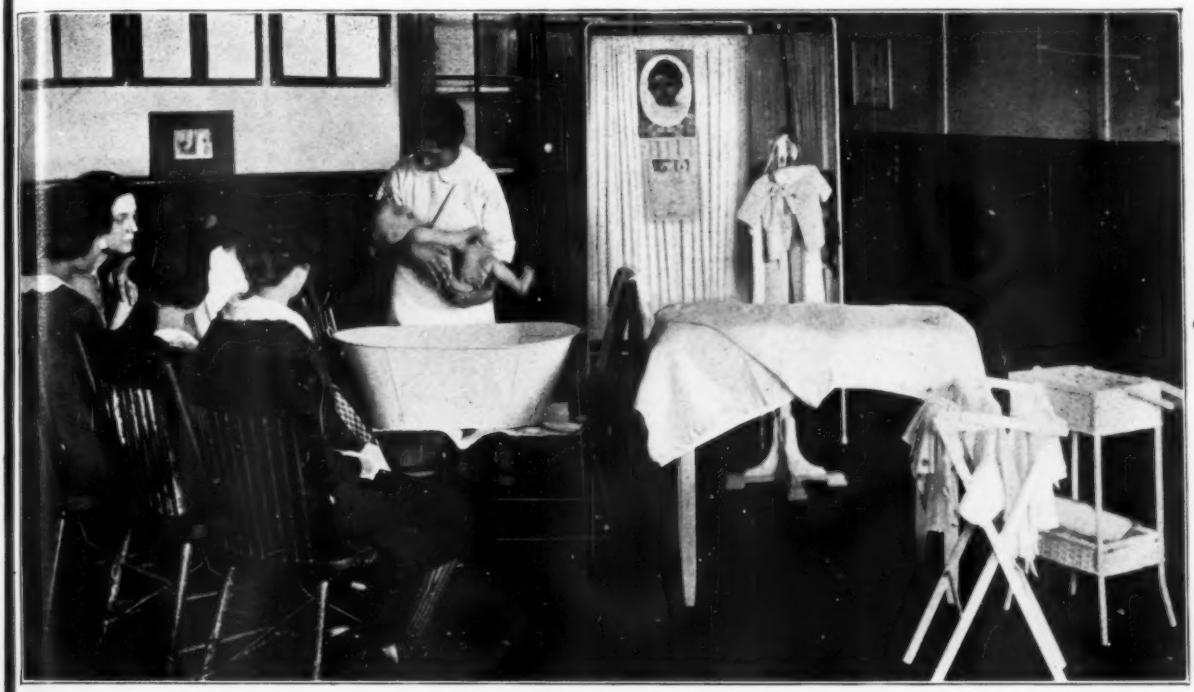
Finally, we can see nothing but the very finest of results to be obtained from vocational training in the shoe industry. More intelligent man power, more enthusiastic population, men with higher earning power, ability to obtain employees from the home town, and the building up of a morale in the town which can net nothing but the very finest of results for inhabitants, town and industry.

SHOE UPPER FITTING

The picture shown above represents a scene in the Fitting Department of the Lynn Independent Industrial Shoemaking

School, and students working on the different processes of shoe upper fitting.

The school was established by the City of Lynn in 1918 and is supported jointly by the City of Lynn and State of Massachusetts. It represents the first attempt on the part of an organized body of educators to teach processes of shoemaking in this country.



Home Nursing, Fall River Continuation School, Massachusetts.

From two hundred and fifty to two hundred and seventy-five thousand people are employed in the shoe industry in this country in gainful occupations. Lynn, Haverhill and Brockton in Massachusetts, Brooklyn and Rochester in New York, Philadelphia in Pennsylvania, Cincinnati in Ohio, St. Louis in Missouri, Milwaukee in Wisconsin and Lynchburg in West Virginia, are all leading centers of shoemaking in their respective states and are all among the largest in the country.

The fitting of shoes illustrated above consists principally of taking pieces of leather or other material which have previously been cut in the cutting department, and "fitting" them together on the different machines and finally attaching them together by sewing processes, the result of which is a fitted shoe upper ready to be lasted. The operations have been very highly specialized as many as sixty operations being performed in fitting one pair of shoes and about thirty being the minimum number in the fitting of any pair of shoes. On women's shoes, the fitting of uppers has been for years, by tradition, allotted to the women. On men's shoes, however, in recent years a large number of the male sex are performing many of the operations. This also applies in the women's shoe trade in some shoe centers.

The health work in our continuation schools is planned to meet the needs of home conditions. The instructors of these classes are graduate nurses with practical nursing experience previous to entrance in the teaching field. Large numbers of the continuation school girls are employed as mothers' helpers. Many of the girls have younger brothers and sisters in their homes and so the work in the child welfare class has an immediate value in the home life. The class visits clinics and nurseries in the school neighborhood and learns by observation. In fine weather girls take turns in bringing a baby from home so that the class may have a live baby to bathe and dress instead of the customary doll. The married graduates of the school frequently return with their babies to show to their teacher and to ask for advice.

The Worcester Boys' Trade School opened in February, 1910. At that time the following two courses were offered:

Machine and Woodwork—Enrollment 52, February, 1910.

For the school year 1926-27 the school offers eleven courses as follows:

	February, 1927 Enrollment
Auto Repair and Power Plant	93
Brick Masonry	38
Cabinetmaking	94
Carpentry	90
Drafting	87
Electrical	97
Machine	160
Pattern	92
Plumbing	35
Printing	60
Wood Finishing and Painting	18
TOTAL	864

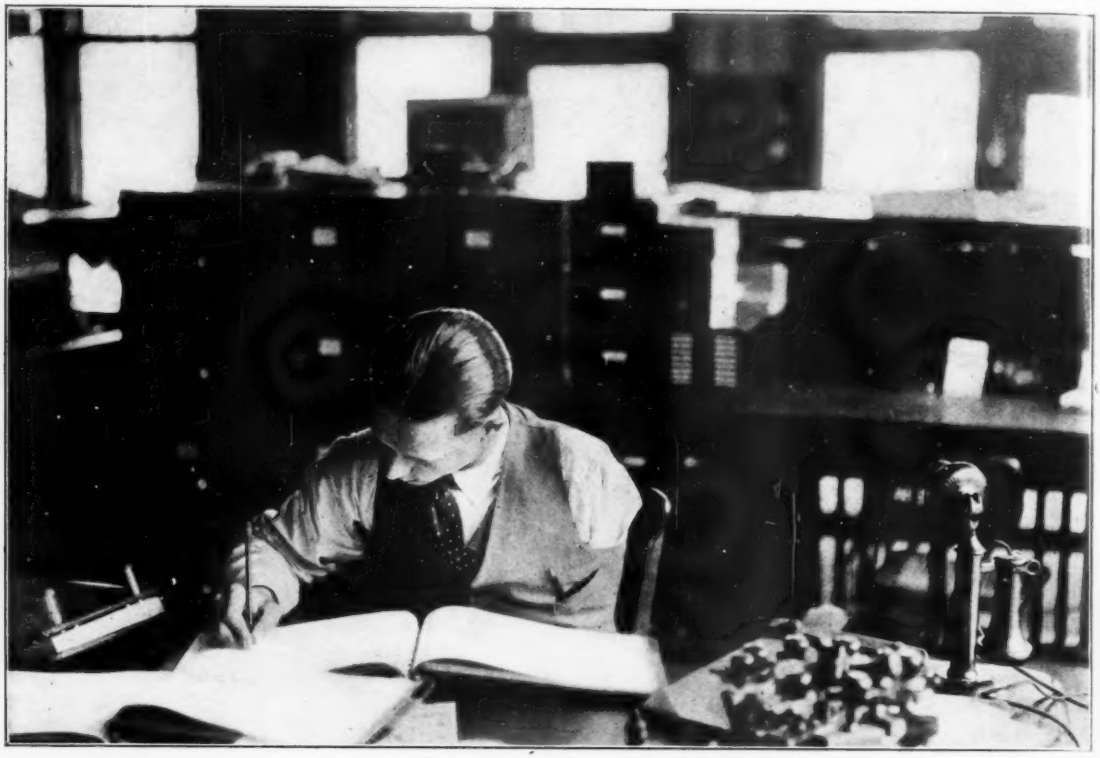
A Sample of Excellent Trade Extxension Work in Compulsory Continuation Schools. This Work is Carried on in Bradford-Durfee Textile School of Fall River.

Experienced, well-trained textile instructors, real textile machines for making yarn and weaving cloth, adequate housing, a program based on a trade extension objective, and

pupils who are employed in the mills of the city provide the setting for a genuine service of upgrading in employment as conducted in the Fall River Continuation School. Human product and the material product are real. Pupils who have received this training have gone back to their employment better equipped in understanding of their jobs, a greater ability to undertake new work in the mills and in individual cases have actually won positions of supervisory responsibility, because of the training received in this school.

There is dignity and significance in this craft. Its history is interesting. Its products are used throughout the world, and there is no limit to its possibilities. The cultural training involved is an asset in the education of any girl or woman.

Printing is the fifth largest industry in the United States. It has opened its doors to women as employees, both directly in the craft and in the associated industries. Women are proving their ability in the printing trade.



Rehabilitation Work in Masachusetts.

This picture represents a young man who left school to go to work after completing the ninth grade. At twenty-one years of age, while employed as a cloth cutter in a textile mill, his left arm was amputated at the shoulder. He was out of employment less than four months when the Rehabilitation Section, with the cooperation of his employer, arranged for a combination of employment training and evening school training. The young man made rapid progress in the office training and completed a four-year evening school course in accountancy. At the time of his injury he was earning fifteen dollars a week. At present, as chief clerk, he is receiving thirty-five dollars per week.

The Possibilities for Women in the Printing Industry

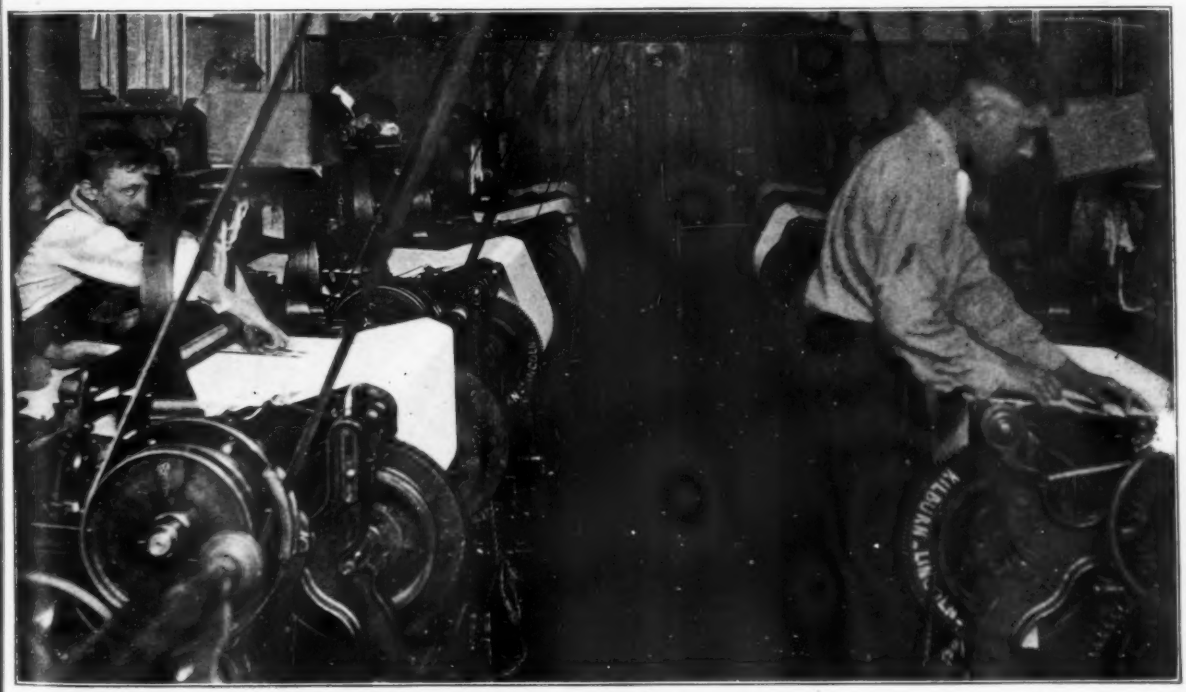
Printing has made the world's best works immortal; it is the mother of progress. Wherever successful communities are found there are also printing establishments to be seen. The craft is practical for girls and women to follow as a trade.

The industry offers a variety of work. The hours are agreeable; the pay is excellent; the working conditions are pleasant. Printing is not a "routine" job but holds a vast store of opportunity for expression of originality and personality. It is the quality of the worker that counts.

Large publishing houses employ women in the print shop itself as well as in the editorial and clerical departments. There are many openings for women as copy holders, proof readers, linotype and monotype operators and correctors of type. The craft is not so much a question of strength and muscular ability as it is of acuteness of intellect, mental alertness and ingenuity.

The first girls' vocational course in Printing to be offered in New England opened in September, 1926, at the David Hale Fanning Trade School for Girls in Worcester. The girls are being given a thorough training in the fundamentals of printing, preliminary to future specialization in line with their respective abilities as demonstrated. Local printers' organizations, whose efforts helped in the establishment of the course, are maintaining an active interest in its success. This is a splendid illustration of the helpful co-operation that should be maintained between the public school and the trades.

David Hale Fanning Trade School for Girls, Worcester, Mass.



Weaving, Continuation School, Fall River, Mass.

Worcester Boys' Trade School, Worcester, Mass.

MISSOURI

The most progressive phases of the vocational agriculture program in the State of Missouri for the year 1926-1927 are (1) Problem method of instruction based on a careful survey of the community to determine its needs, (2) Conducting evening schools or part-time schools, (3) Advising the vocational agriculture teachers to encourage modernizing the farm home, (4) Suggesting that farmers be encouraged to grow more of their living on their farms, (5) Conduct the Community Improvement Contest. This contest is intended to enable the teacher to have the students put into practice on their home farms the best methods as taught in the class room. It is founded on the basic principle that if it is a good thing to teach that a certain thing should be done, it is a good thing to do it, i. e., put into practice what is being taught. This contest has been unusually well received by both students and teachers and is considered an outstanding piece of work by this department. There are revisions to be made and probably much room for improvement but the results so far have been very gratifying.

The other phases mentioned above are self-explanatory.

G. E. JAMES.

REPORTS FROM TWO LAYMEN ON VOCATIONAL HOME ECONOMICS

"I think Vocational Home Economics is the most wonderful department we have in our high schools. During this trying period of unrest when the American home is struggling to adjust itself to new economic conditions and the wider opportunities that are coming to women, the new and broader home economics teaching is like a mighty anchor. It teaches girls: (1) How to keep well; (2) How to use fundamental processes; (3) How to make a good home and rear children; (4) How to work efficiently and happily; (5) How to be a faithful citizen; (6) How to regulate her life according to the standards of right living."

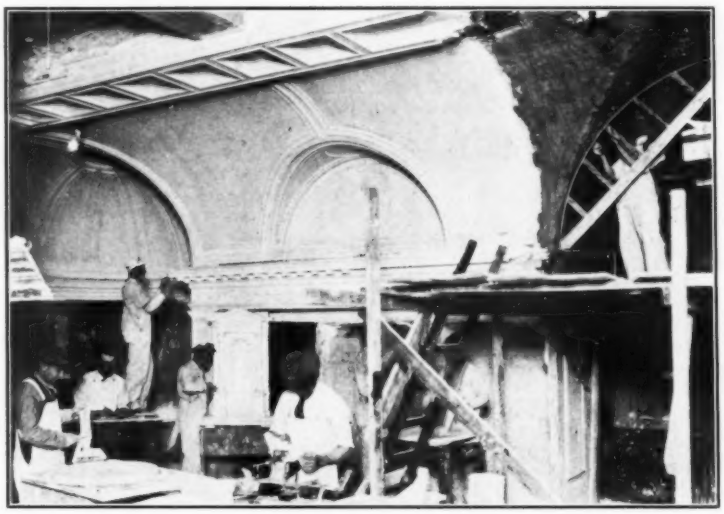
MRS. A. T. MCMURTREY, President,
Parent-Teachers Association, Salem, Mo.

"A few of the benefits derived from the Home Economics course offered in our high school are (1) Increased pride, confidence and morale in the girls; (2) A keener interest in school life aroused by friendly rivalry in making exhibits and contests; (3) A drawing card for rural students; (4) Advantages of the course brought to every class of students have raised the general standards of the community; (5) Parents are brought into contact with the school; (6) Increased interest and pride of all classes of citizens in educational matters; (7) The teaching of economy and thrift; (8) Instruction in home nursing has resulted in happier and healthier children."

CHARLOTTE STEBBINS BASS,
Lebanon, Mo.

REPORTS FROM TWO LAYMEN ON VOCATIONAL AGRICULTURE

"The Department of Vocational Agriculture of the Clinton High School is one of the most valuable assets to agriculture



Plastering Apprentices, Detroit, Mich.

and the farming community that this county ever possessed. Most of the students are directly interested in the agricultural vocation and carry the knowledge they acquire to their respective homes, where it is brought up for discussion, and in this way other members of the family come in direct contact with what is taught. I heartily endorse this department of our public schools and sincerely hope the work will continue to be carried on by the State and Federal appropriations."

TRUMAN G. SPANNAGEL,
Bellevue Egg Farms, Clinton, Mo.

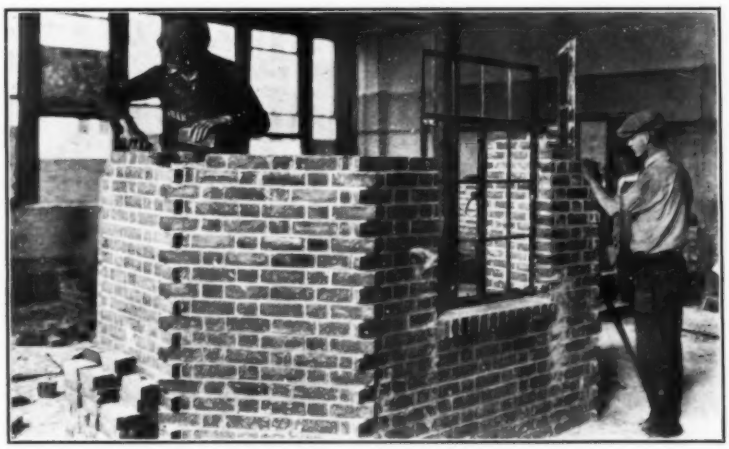
"I regard Vocational Agriculture as one of the most important courses in our school. My son has completed this course, and I am sure he has gained several years of practical knowledge of farming which will prove of great benefit to him in the future as he will not have to make the costly experiments that I have had to make in practical farming. I feel that any boy who finishes this course is as well equipped as the average farmer of years of experience."

JOHN R. THOMPSON,
Marble Hill Farm, Mound City, Mo.

MICHIGAN

By K. G. SMITH, State Supervisor of Industrial Education

The most notable development in Michigan during the past two years has been that of trade apprenticeship, particularly in the building trades in the City of Detroit. These apprentices are attending school four hours each week and working on the job the rest of the time. The number so attending is now about six hundred. In addition to these there are fifty printers apprentices and eighty apprentices in the metal trades.



Bricklaying Apprentices, Detroit, Mich.

The Saginaw Valley Manufacturers' Association is taking a deep interest in the development of vocational courses in the Saginaw schools. Arthur Hill Trade School has done outstanding work and a survey of graduates shows that seventy-five per cent of them are following the line of work for which they were trained. The trades taught are printing, patternmaking, drafting, electrical work, machine shop, and auto mechanics.

In Jackson, apprenticeship in the metal trades has been developed under the leadership of Charles A. Wardner and a committee of the Employers' Association. The apprentices are given thorough instruction on various machines and if necessary are transferred from one factory to another. Four hours a week of school are required of each apprentice and a careful record is kept of his progress both in school and shop. On the completion of his course he receives a substantial bonus and a journeyman's certificate in a neat leather case.

Bronze casting plaques, designed by the Art Department of the Technical and Vocational High School, Grand Rapids, Michigan, for this entrance to the Grand Rapids Filtration Plant. The plaques were designed at the request of the Service Department of the City.

NORTH DAKOTA

For the fiscal year ending June 30, 1927, a total of 63 Home Economics departments will receive Smith-Hughes Federal aid. This is an increase of 54% for the past two years. The number of agricultural departments has increased 100% the past two years.

In this State the local districts match the Federal aid for agriculture and home economics. For the agricultural departments the reimbursement is 50%. For home economics the Federal reimbursement is less than 25%. In view of the fact that the school districts are willing to maintain vocational departments and stand the greater portion of the expense it would seem that vocational education is on a sound basis.

Class in Animal Husbandry studying Southdown Sheep in specially equipped class room. Park River, N. D.

OHIO

Ohio State Board for Vocational Education Division—Trades and Industries

By E. L. Heusch, Supervisor

Material progress has been made in the establishment of various types of vocational training.

Apprentice education has been developed in many localities under the guidance of joint committees representing the employer, the employee and the public. A Joint State Apprenticeship Commission for the plumbing and heating industries has been operating successfully during the past year. Interest in establishing apprenticeship commissions for other trades is increasing.

A State-wide program for the training of conference leaders has met with remarkable success. Interest in the improvement of foremanship in industry is general throughout the State. Eventually every city of sufficient size in Ohio will be prepared to offer classes in foremanship for the local industries by making use of locally trained conference leaders.

Itinerant teacher-training constitutes the major program of the teacher-training service. Twenty extension centers are now served by the teacher-training staff. The program has largely included the teachers in service, although in a few of the larger cities, there have been organized special classes for tradesmen who are preparing to teach shop or related subjects in vocational schools. In a few instances, the local supervisor has carried on informal specialized help to individual teachers.

There has been a steady development of special types of classes or schools. Some of these include such industries as coal mining, ceramics, building and mechanical trades, pulp and paper industry, textile industry and others. The greater emphasis has been placed on part-time trade extension and

Sewing Trades School, Cincinnati, Ohio. A view of the power-machine line where girls are trained to do factory work on actual jobs sent in from industry.

North Dakota State School of Science, Wahpeton, North Dakota. (1) Trade sewing. (2) Making up small pica. (3) The Linotypes. (4) Office training. (5) Typewriting class.

co-operative programs. However, the day unit trade and evening trade extension organizations have progressed satisfactorily.

The Foremanship Training Course as carried out by Mr. R. W. Jenkins was very satisfactory. It has been a surprise to the writer the development made in the men during the course. They have developed a confidence in themselves, a better understanding of what co-operation means and have obtained a knowledge of teaching which was not known to them before.

Industry as well as individuals must be benefited by such a course. A telephone call five minutes ago verifies this assertion. The Foremen's Group are this week to visit a plant for inspection. The boss of one of our large industries here just asked "can we send any of our foremen who did not take the course on this inspection tour?" He received an affirmative reply and the outcome of same was "I want more of my men next year to take your course in foremanship and believe you will be satisfied with the number." Thus the firms themselves feel that this is a permanent department in education.

H. S. Hastings,
The Foremen's Club of Canton.

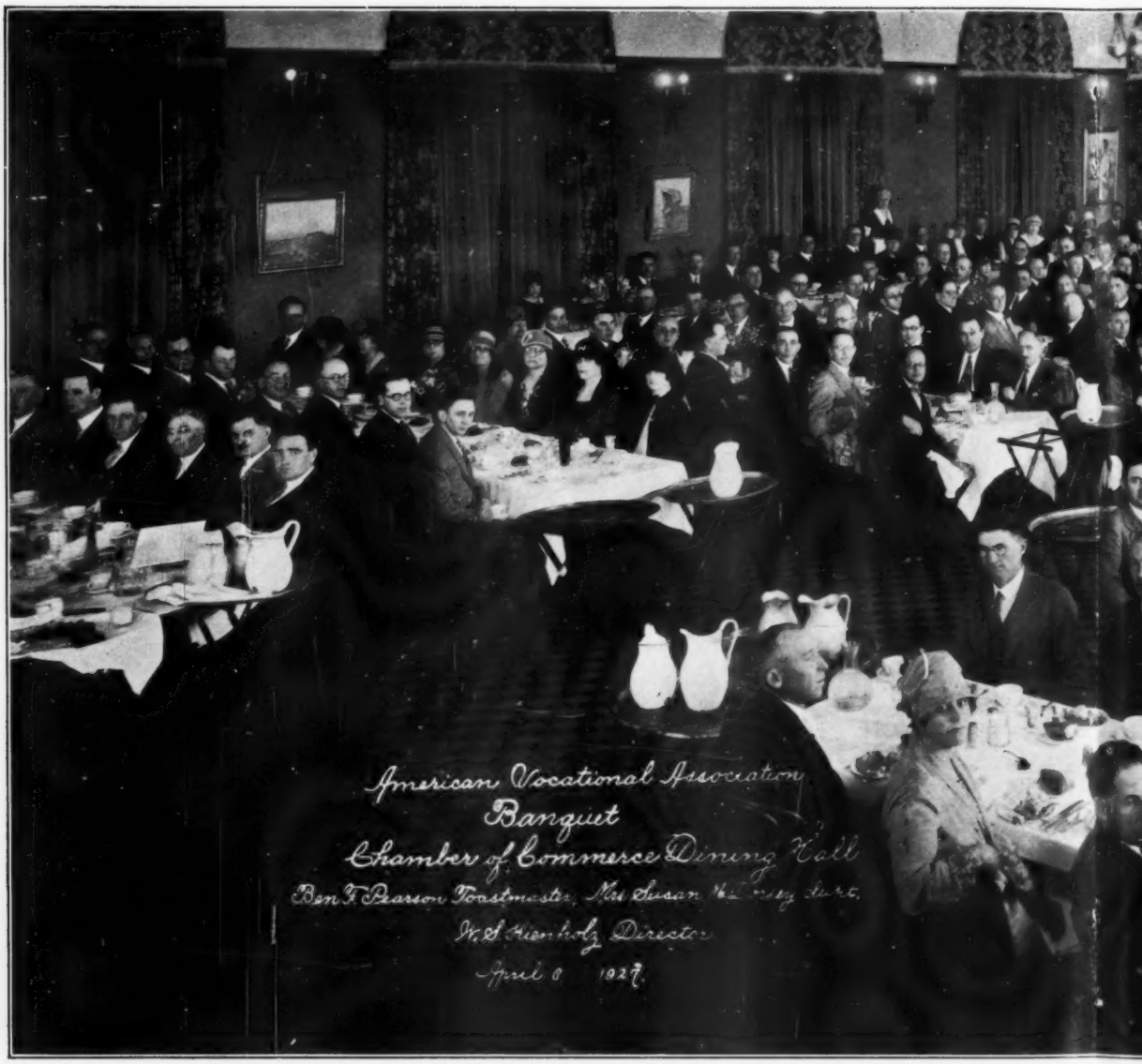
The Cleveland Trade School operates all of its vocational training courses in cooperation with local committees representing both the employer and the employee. All of the apprentices in the following building trades attend school four hours per week throughout their entire four years of apprenticeship: bricklaying, carpentry, plumbing, stone-cutting, sheet metal, painting, paper-hanging and electricity. The graduating diploma of the school is accepted by both unions and contractors' associations as a certificate of journeymanship.

All of these apprentices are controlled by committees consisting of contractors and union representatives for each trade in so far as apprenticeship goes. All matters pertaining to the education of the apprentice are controlled by the Division of Vocational and Practical Arts Education of the Cleveland Board of Education, cooperating with the State and Federal Boards for Vocational Education.

Due to the fact that pupils work with moving machinery, definite pre-apprentice courses are offered in the metal and auto mechanics trades. The pupils attend school one full year upon an all-day trade-preparatory basis from approximately 15 to 16 years of age, one-half the time being devoted to intensive shop instruction and the other half to related subjects. The second year is upon a cooperative part-time basis of two weeks on the job and two weeks at school, and the third and fourth years are part-time trade extension of four hours per week.

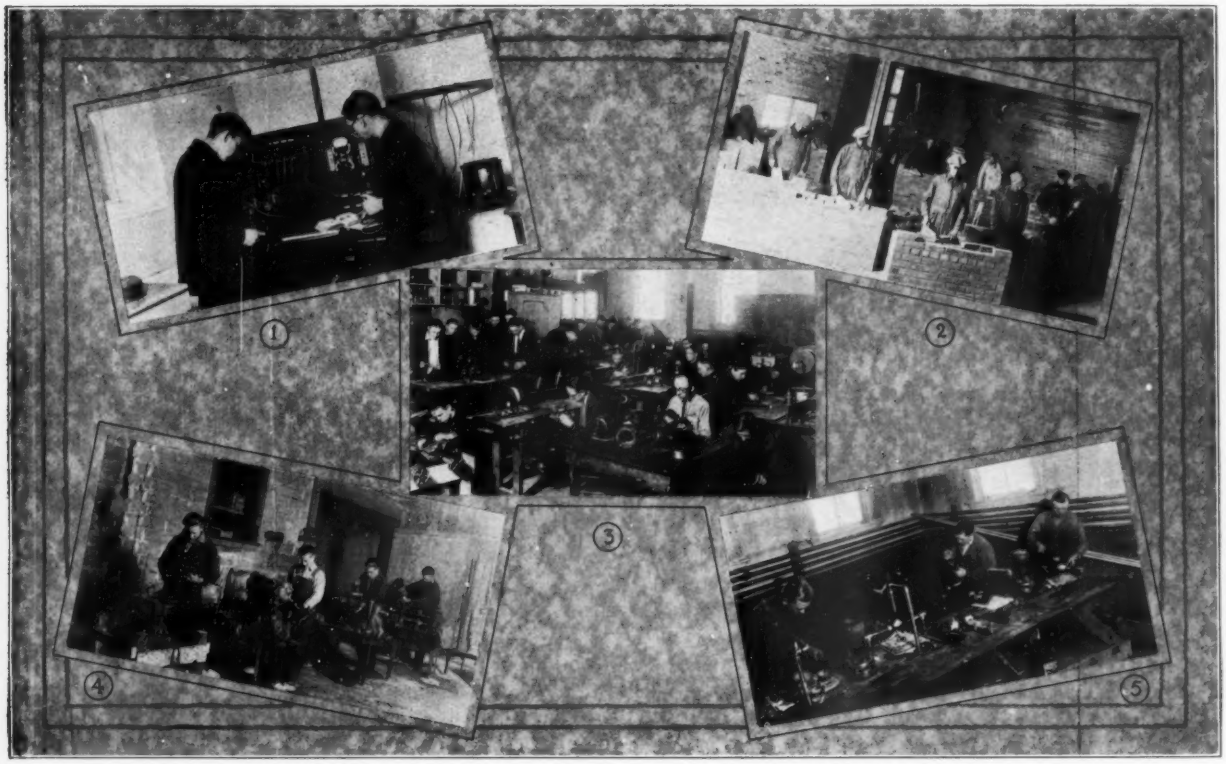
Through an agreement with all the various metal trades organizations of Cleveland, a large group of machine and tool-making apprentices are enrolled in this school.

Cooperating with the Cleveland Automobile Dealers and Manufacturers Association, all of the auto mechanics apprentices in the city of Cleveland are being trained at the Cleveland Trade School.



These 361 California men and women met in Los Angeles, California, on April 6, to confer with Edwin A. Lee and Z.
for the annual A. V. A. Convention to be held in L

in A. Lee and Z. M. Smith, President and Secretary, respectively, of the American Vocational Association, to map out plans on to be held in Los Angeles, December 17, 19, 20, 1927.



North Dakota State School of Science, Wahpeton, North Dakota. (1) Meter testing, electrical trades. (2) Brick laying speed contest. (3) Armature winding, electrical trades. (4) Auto mechanics. (5) Joint wiping, plumbing trades.

In practically all trades, a large part of the equipment and practically all of the supplies are furnished by cooperating agencies.

There is scarcely an organization in Cleveland in any way interested in the vocational education movement that is not represented upon some advisory committee. This has resulted in 100 per cent cooperation and has made the school an outstanding success.

The training department of our company has been cooperating with the Ohio Board for Vocational Education ever since the board was established.

During this time our company has had several important expansions, increasing its working force to approximately double what it was ten years ago, yet this expansion has been accomplished with very little importation of skilled men, practically all of our present force being home trained. This training program includes: metallurgy, industrial chemistry, combusion, drafting, blue-print reading, stenography, typing, industrial management, and perhaps most important of all, job training and foremanship. The State Board for Vocational Education has been a valuable aid in this training.

THE AMERICAN ROLLING MILL CO.
A. J. BEATTY, Director of Training.

PENNSYLVANIA

Public School Boys Contribution

On the following page is a picture of the authorities of the Monessen (Pennsylvania) Public Schools and the eight boys of the Vocational Department, who last year completed the construction of a modern six-room house. Standing on the porch of the house, from right to left are: Mr. C. R. McClelland, Supt. of Public Schools; Mr. W. F. Blackburn, Principal of the High School; Mr. Edward Ciriacy, Instructor of Carpentry; Mr. Chas. M. Helwig, Supervisor of Industrial Education. The lower group is composed of Nicholas Lusich, Guss Kruell, Andrew Lenio, (Seniors); Joseph Hornack, John Samonsky, Wm. Heath, Alex Krill and Walter Skrocki (Juniors).

THE CONSTRUCTION OF A MODEL HOME

By Monessen High School boys in Carpentry Trade Department

Again a sturdy bunch of twelve have undertaken to repeat last year's experiment to produce a still finer and better structure in which some group may enjoy the comforts of a home, by the creative minds and hands of a dozen happy boys.

The boys in the house building movement in the Carpentry Department of the Monessen High School have adopted the SLOGAN "We build for the future" in recog-

Automotive Trades School, Cincinnati, Ohio.

nition of the support and encouragement given this movement by Mr. C. S. Duvall, a local Kiwanian and Real Estate dealer, who was willing to finance the undertaking, when the idea was presented to him by the Supervisor of Industrial Education.

The structure below was built by eight boys during last school year, three seniors and five juniors. None of the boys had any previous experience in house building, except in the school shop, for one school year on a half-day basis. All carpentry work was done by the boys without assistance, except from Mr. Ciriacy, the instructor in carpentry, who acted as foreman, during the construction.

The house has six rooms, a cellar and attic. The foundation walls are concrete blocks. On the first floor are the kitchen and dining room in the rear, with the living room extending entirely across the front. The dining room and living room have hardwood floors. Attractive lighting fixtures are conveniently arranged. Upstairs are three bedrooms and bath, with a hallway entrance to either of the rooms, and an attic, which can be converted into another bedroom.

All electric wiring and installation of lighting fixtures was done by the boys in the electrical department, under the instruction of Mr. P. J. Moore, Instructor of Electrical Wiring and Testing, in the vocational department of the high school.

It is interesting to note that the boys in the carpentry department did more than the woodwork. They did the greater part of the excavating, all the painting, staining, varnishing, flashing and roofing. The masonry, plumbing, heating, plastering and papering were done by outside workmen on a contract basis.

Courses in the industrial vocational department are organized on a three-year basis. Pupils may elect one of the courses at the completion of first year of high school. The carpentry is conducted on the operative plan, that is, three hours each day. The machine shop and electrical courses are operating under a two-year unit trade, in school, followed by one year of co-operative work, on the two weeks alternate periods in industry, and two weeks on alternate periods in the related subjects and sciences.

CHAS. M. HELWIG.

House constructed by boys in the Carpentry Trade Department of the High School in Monessen, Pennsylvania. Chas. M. Helwig was the instructor in charge.

Class in Cotton Classing at Livingston. O. T. Ryan, Teacher of Vocational Agriculture, Texas

TEXAS

Progress in Vocational Agriculture in Texas

Vocational agriculture has made distinct progress in the following phases of our program.

A more effective working program with the Farm Bureau, Bankers Association, Agricultural Agent of Railroads, Chambers of Commerce, Fair Associations, Fertilizer Associations and Extension Service.

As an example of how such co-operation may work out we may cite the case of the Agricultural Agent. As a result of the interest of the Agricultural Agent of the M. K. & T. Railroad our judging team was furnished transportation to the Kansas City Royal. Two good departments of vocational agriculture have also been established due to the activity of this agent.

These co-operating agencies directly or indirectly offer many possibilities for the advancement of the program in vocational agriculture.

The columns of The Progressive Farmer have been used very effectively to inform the public concerning the best things happening in vocational agriculture. An average of one page per month has appeared.

The evening school program has made a distinct advance in the type of instruction as well as in the number of classes. At least one evening school class has been generally accepted by the teacher as a part of his regular work.

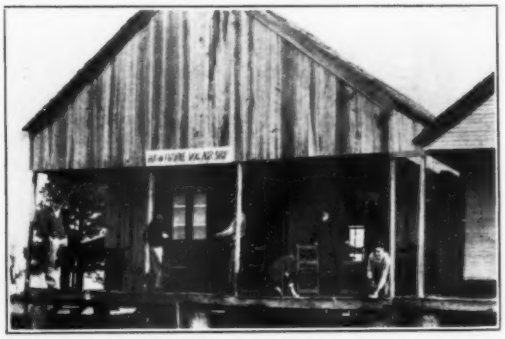
Vocational Agriculture Class, Kenedy, Texas. C. H. Colvin, Teacher. Boys learning use of farm machinery.

TRADE AND INDUSTRIAL EDUCATION

Owing to the state aid being discontinued for the years 1925-26 and 1926-27 by veto of our appropriation, Texas has been compelled to keep going all work which was started and not attempt any considerable amount of new work. We have, however, tried to meet the demands of industry by putting on a special foreman training leader as an assistant in the teacher training department of the University of Texas. Mr. Hartman Dignowity, who has charge of this work, has held two conferences since this work was started March 1st. He has put on conferences with the foremen of the Marland Oil Company and has obtained some excellent results. These reports will be ready for distribution in a short time to those who are interested. One hundred fifty-one foremen were in the conferences held.

HOME ECONOMICS EDUCATION

Home economics suffered most when state funds were cut off. The day-school people were very active in helping to educate the legislature as to the needs for an appropriation for home economics work. The number of day-schools



This school is located in a poor community. Land poor, many people moved away. Mr. W. F. Rudd, teacher of agriculture, was unable to secure funds for building a farm shop so a vacant store was rented. In this building a very large amount of miscellaneous repair work has been done. Texas.

meeting full requirements was growing rapidly. Our practice had been to use federal funds for promoting evening school work, and state funds for day schools. The veto wiped out all state funds. In order to keep faith with those who had worked hardest for the appropriation, the federal funds were withdrawn from the evening schools and prorated to the day schools meeting federal requirements. This accounts for the slump in evening school work. The interest has been kept alive, however, and with the restoration of funds, rapid growth in adult classes is certain.

Interest has been stimulated in home economics work in negro schools by a special news letter, and by developing a feeling of responsibility for the negro work on the part of the white teachers.

Although the record of progress as shown by the figures shows little growth, figures could hardly be more misleading. The work will come back and the figures soar when adequately supported by the state.

VIRGINIA

The State Department of Vocational Education of Virginia has extended its services in several ways, principal among which are the following:

1. The division of Trade and Industrial Education is cooperating with the Virginia Coal Operators Association and the United States Bureau of Mines in an intensive program to reduce accidents. Twenty-three safety engineers and foremen have been given a ninety hour intensive teacher training course taught by the State Supervisor of Industrial Education and a specialist from the United States Bureau of Mines. These men will return to their respective companies and organize evening classes.

2. The division of Trades and Industrial Education is also cooperating with the Virginia Association of Graduate Nurses and the State Examining Board for Nurses for the purpose of establishing training schools. The first step in the program is the training of teachers. This program will be started at an early date. In addition graduate nurses will be trained in midwifery.

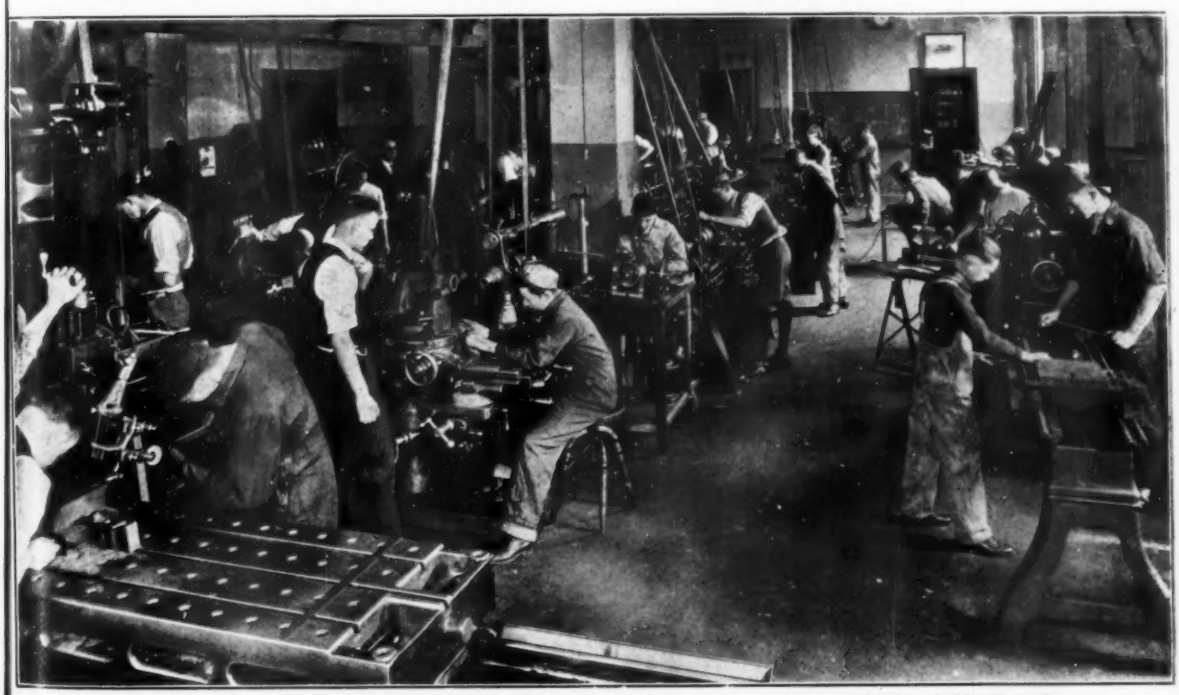
Teacher Training in Mine Safety and Accident Prevention

By GEORGE M. THORN, Chairman of Educational Committee Virginia Coal Operators Association

The Educational Committee of the Virginia Coal Operators Association has been instrumental in organizing a teacher-training class to train men to teach mine safety and accident prevention in the coal mines of Virginia. This class is composed of twenty-three safety men and foremen, representing thirteen companies, and it is our objective to have these men return to their respective companies and organize evening classes in mine safety and accident prevention in order that the men working in and about the mines may more thoroughly understand their jobs.

The class is now in session at Norton, Virginia. The technical phases of the work are being taught by Mr. E. H. Graff, specialist of the United States Bureau of Mines who will also assist the men in organizing the subject matter of mine safety and accident prevention into a course of study. The methods of instruction to be employed and the science of teaching is being taught by Mr. B. H. Van Oot, State Supervisor of Trade and Industrial Education, and Mr. D. M. Borum, foreman trainer, employed by the Virginia Coal Operators Association, in cooperation with the State Board for Vocational Education.

For several years our company has maintained vocational classes in one form or another in order that our more ambitious employees might better fit themselves for their daily tasks. We believe that when trained minds direct trained hands, a quantity output of quality products must result. We rely largely on these vocational classes to provide the necessary mental training.



A Day-Unit Class in Machine Shop Practice, John Marshall High School, Richmond, Va., Public Schools.

The ability to give First Aid, whether to stumped toes or button casualties, a required accomplishment of all Home Economics girls of Virginia.

A part-time class composed of members of the Blue Coat Division of the Norfolk, Virginia, Police Department. The instructor, who is a young attorney having several years' experience as clerk of the police court, teaches them to analyze and classify crimes, and gives instruction in Deportment and Discipline, the law of arrests, the taking of proper and sufficient evidence so as to be fair to both parties, the State and City Code, Essentials of Warrants, Patrol and Observations, Report writing, Court Procedure and Demeanor on the Witness Stand, pistol practice, handling of children, demeanor in emergencies, psychology applied to criminals, mobs, children, periods of excitement and carelessness.

Our apprentices have regular classes in mathematics, physics, shop-sketching and mechanical drawing, and the benefits resulting from this training are clearly evident in the shops. The micrometer has lost its mystery, the vernier is no longer difficult, the blueprint has been robbed of its terrors, and the ammeter and voltmeter are instruments of real purpose. In every direction, definite knowledge supplants hazy guesswork, all as a result of vocational training.

H. L. FERGUSON, President,
Newport News Shipbuilding and Dry Dock Company.

Are the Cows Returning a Profit? Records on many cows are kept by students in Vocational Agriculture in Virginia. The milk is tested by them in the classroom and they are able to determine whether milk is being produced at a profit or a loss on their home farms.

Courtesy U. S. Department of Agriculture

The Local Advisory Committee. This group is listening to a summary of local farming practices and conditions, prepared by the instructor from a survey of fifty farms. These men will assist him in determining his program of work and the content of his courses in the Agricultural Schools of Virginia.

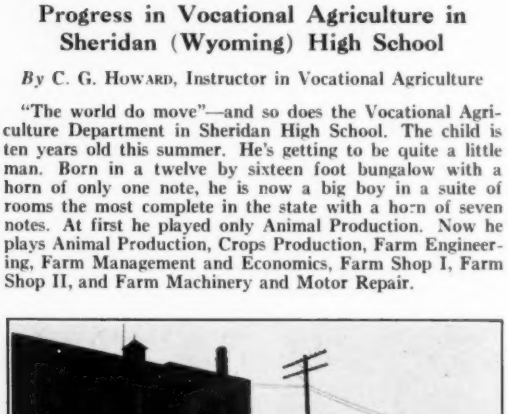
This is one of three part-time classes in Salesmanship conducted by the Richmond, Virginia, Public Schools in co-operation with department stores.

WYOMING

Progress in Vocational Agriculture in Sheridan (Wyoming) High School

By C. G. Howard, Instructor in Vocational Agriculture

"The world do move"—and so does the Vocational Agriculture Department in Sheridan High School. The child is ten years old this summer. He's getting to be quite a little man. Born in a twelve by sixteen foot bungalow with a horn of only one note, he is now a big boy in a suite of rooms the most complete in the state with a horn of seven notes. At first he played only Animal Production. Now he plays Animal Production, Crops Production, Farm Engineering, Farm Management and Economics, Farm Shop I, Farm Shop II, and Farm Machinery and Motor Repair.



New $10,000 shop building, Rock Springs, Wyoming. A three-year general mine electricity course is offered. Over ninety per cent of the graduates are being successfully placed.

The boy's technique is good, too. He plays his stuff on the job basis and it is all determined by local problems and conditions.

He practices, too, working hard on bigger and better projects all the time.

It seems reasonable to suppose that if he can weather his adolescent years, he will be a man of great service and usefulness to the community.

No one is looking forward to that time more than papa.

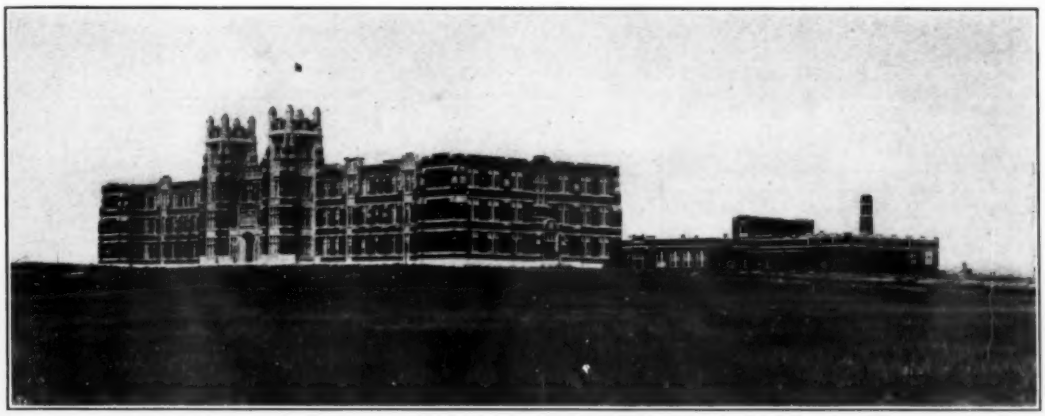
Papa has been on the job six years, having adopted the boy because he was such a wayward child with poor manners. But papa has developed with the boy and understands the child's moods pretty well now. He thinks he can pull the boy through and make a farm hand of him yet.

MINE ELECTRICITY AT ROCK SPRINGS, WYOMING

The department of mine electricity in the local high school has been in existence for eight years. In that time it has grown from a part time job for one instructor to the place where it requires two full time and one part time instructors. Most of the first equipment was cast-off machinery which had been donated by the various mining companies. The value of the present equipment would be in excess of $7,000. The first location of the shop was in the same room with manual training. Now it is housed in a separate building 28 by 136 feet and use is made of a drawing room which will accommodate thirty students.

A large percentage of the graduates have secured employment with local concerns. Not a few of them have attended night school together with a good representation of the men working as electricians, machinists and miners. This has had a very wholesome effect on the boys taking the course.

(*Continued on page forty-five*)



Provincial Institute of Technology and Art, Calgary, Alberta. Main building with Shop Annex Showing Wing Foundation under Construction, 1926. 1,300 Students were catered to in 1926-27 Term.

CANADA

The Development of Vocational Education in Canada

By A. W. CRAWFORD, Federal Director of Technical Education

The story of the growth of vocational education in Canada can best be told in nine parts because the Dominion contains nine provinces, each of which has its own educational system and is mistress in its own schools. An attempt will be made in this article to outline the development of the work assisted by feedral grants under the Technical Education Act of 1919.

THE NATIONAL SITUATION

Under the provisions of this act the Dominion Government assists in the promotion and development of vocational education of less than college grade by sharing equally with each provincial government approved expenditures on all branches of vocational education, except agricultural. The act provides for the expenditure of $10,000,000 during the ten-year period ending March 31st, 1929, and the money is allotted to each province on the basis of population. A similar act which expired in 1923, and was renewed for one year, provided $10,000,000 for the promotion of agricultural instruction.

The only other vocational education activities in which the federal government is directly concerned are Indian schools, fisheries schools, schools of navigation, and certain branches of agricultural work such as experimental and demonstration farms. These activities are carried on by federal agents and supported by federal funds. They are not part of the provincial systems of education.

The Yukon and Northwest Territories, which are under federal control, are not included in this brief sketch because no vocational work is carried on in these vast but sparsely populated areas of the north.

When it is considered that Canada has a total area of 3,797,123 square miles, which is larger than the United States and Alaska combined, and that the total population according to the last decennial census in 1921, was 8,788,483, or about 8 per cent of that of the United States, one can appreciate the difficulty in developing suitable vocational education programmes to serve the whole nation. Canada is a bilingual country, both French and English being official languages and, in many parts of the west, there are large colonies of new Canadians who still retain the languages and customs of their native lands. In the newly settled parts of the country, the educational authorities have their hands full in providing an elementary schooling for all children and there is little money or time left for the promotion of specialized training of any kind. Correspondence instruction, traveling schools, short-term classes and many other devices are being tried out by the provincial departments of education in an endeavor to provide adequate and suitable educational facilities for every child and adult.

Despite these difficulties of a new country, splendid programmes of vocational education are provided in the older and more thickly populated sections and a beginning has been made in providing this service for the small centres and for isolated individuals. The total number of pupils enrolled in classes receiving federal grants under the Technical Education Act is approximately 100,000. The growth of the work during the past seven years is indicated by the following table:

VOCATIONAL SCHOOLS, TEACHERS AND PUPILS IN CANADA, 1919-1926

Years	Number of Municipalities		Number of Teachers				Number of Pupils			
	Day	Evening	Day	Evening	Correspondence	Total	Day	Evening	Correspondence	Total
1919-20	32	97	384	1423	3	1810	8512	51827	207	60546
1920-21	45	149	573	1605	4	2181	11683	44441	620	56744
1921-22	54	167	527	1711	30	2268	13588	46219	2154	61961
1922-23	54	156	752	1883	39	2674	16242	53080	978	70300
1923-24	58	156	929	1970	44	2943	20527	57986	1316	79829
1924-25	65	156	1057	2273	28	3158	24137	62249	1638	88024
1925-26	72	166	1361	2090	27	3478	39010	57706	1396	98961

The extent of the work in each province is indicated by the following table:

MONEY AVAILABLE AND MONEY PAID TO THE PROVINCES UNDER THE TECHNICAL EDUCATION ACT FOR THE FISCAL YEAR ENDED MARCH 31, 1926.

Province	Annual Appropriation	1. Total Amount Available	2. Amount Paid to Province
British Columbia	70,374.35	163,422.67	53,123.05
Alberta	77,725.40	112,666.54	72,731.78
Saskatchewan	97,165.78	249,641.84	20,083.89
Manitoba	80,218.72	213,820.66	19,488.77
Ontario	347,636.30	347,636.30	347,636.30
Quebec	281,751.31	559,797.14	299,143.78
New Brunswick	54,640.80	152,581.72	93,874.50
Nova Scotia	70,288.60	204,401.12	30,999.96
Prince Edward Island	20,198.74	63,019.46	7,254.66
Totals	1,100,000.00	2,066,987.45	944,336.69

NOTE—1. The total amount available includes the annual appropriation and the amounts carried forward from previous years. Not more than 25% of the annual appropriation is carried forward. Any unearned balance in excess of this amount lapses.

2. The amount paid to each province represents one-half of approved provincial government expenditures except for Ontario, where sufficient money was not available. In most provinces the expenditures by local authorities greatly exceed the amount expended by the provincial government.

PRINCE EDWARD ISLAND

Prince Edward Island is the smallest province in Canada, having an area of 2,184 square miles and a population in 1921 of 88,615. It is a rich agricultural country but has very little industrial development and only one city of over 10,000 population.

Vocational education in the Island may be said to have started with the opening of the Agricultural and Technical School, at Charlottetown, in November, 1920. This school provided two year day courses in agriculture and motor mechanics, in addition to short-term and evening courses in various subjects, during the winter months. The cost of equipping and operating the school was shared equally by the Provincial Government, the Federal Department of Agriculture, under the provisions of the Agricultural Instruction Act, and the Federal Department of Labour, under the Technical Education Act. In 1922 the courses provided were—

1. A matriculation course for students who wish to take the four years at one of our agricultural colleges.
2. An advanced course in agriculture for students who have taken the first year course, or for students whose scholarship would enable them to profit by the instruction given.
3. An elementary course in agriculture for all students over fifteen years of age.
4. A motor mechanics course for students who wish to specialize along this particular line.
5. A course for lobster packers and factory operatives.
6. A course in household science for girls.
7. Night classes for city students.
8. Short courses (two weeks) in live stock, field crops, motor mechanics, cheese and butter making.
9. Course for cheese and butter factory operatives.

Home economics classes were added in 1923. In 1924 the school had an enrollment of 97 pupils in day classes and 196 in evening classes but owing to the expiration of the Agricultural Instruction Act, which cut off one-third of the school's revenue, the day classes were discontinued and evening classes were moved to cheaper quarters. Commercial classes were started in connection with the Prince of Wales College in 1925 and evening classes were opened in Georgetown, a small centre near Charlottetown. In 1926 the courses offered were:

1. Short term courses in home economics including millinery, dressmaking, laundry, home nursing, household administration, accounts and English reading.
2. Short term courses in motor mechanics, woodworking, blacksmithing, civics, commercial arithmetic, English reading and drawing.
3. Special short courses for cheese and butter makers, followed by visits of instructors to factories for inspection, observation and demonstration.
4. Commercial course of two years open to students having completed two years of high school work.
5. Night school courses for day workers, to fit them for advancement.

The day work is still confined to Charlottetown but evening classes are operated in six municipalities. The total enrollment in day classes in 1926 was 234 and in evening classes 423.

NOVA SCOTIA

Nova Scotia is next in size to Prince Edward Island, having an area of 21,428 square miles and a population of 523,837. Halifax, with a population of 58,372, is the largest city, and only two other municipalities have populations of over 10,000.

This province was one of the first to organize vocational education and its programme was more or less fixed before federal grants became effective. No new developments have taken place since 1919 but the work has continued to make progress slowly, despite adverse industrial and financial conditions.

Day schools are confined to Halifax, where short-term courses of two months are provided in the Provincial Technical College, for small groups of men from different industries. Evening classes provide vocational instruction for approximately 2,800 pupils in 28 municipalities. Over 700 pupils from all parts of the province are enrolled in 42 vocational correspondence courses conducted by the Provincial Department of Education. The Nova Scotia College of Art, in Halifax, receives provincial and federal grants and has an enrollment of over 160. The total enrollment in all vocational classes receiving federal grants in 1926 was 3,548.

The corerspondence classes were started in 1916 but were temporarily abandoned in 1917. The federal grants made it possible to revive this work in 1921 and it has now become a permanent part of the programme in Nova Scotia.

Evening classes are divided into two groups, technical classes and coal mining classes. The latter serve the men engaged in the coal mines who desire to qualify for supervisory and official positions. The technical classes supply the needs of commercial workers, home-makers and skilled workers in various industrial lines.

NEW BRUNSWICK

New Brunswick is the largest of the Maritime Provinces, covering an area of 27,985 square miles. Its population is less than that of Nova Scotia being 387,876 in 1921. Only

two cities had more than 10,000 inhabitants, Saint John, the larger, having a population of 47,166.

It may be said that vocational education in New Brunswick started concurrently with federal aid, since the Vocational Board, which controls the work in the province, was established in May, 1919. The first vocational school was opened on November 1st, 1919, in Woodstock. It was built with funds left for that purpose by the late Mr. L. P. Fisher and is maintained jointly by the town of Woodstock, the Carleton County Council and the provincial and federal governments. The work undertaken in this school included prevocational industrial classes, day vocational classes in commercial work and homemaking, part-time classes in agriculture, and evening classes in a variety of subjects. In the same year, evening classes were opened in two other municipalities.

Rapid progress has been made during the past seven years and New Brunswick now has two purely vocational schools at Woodstock and Saint John and six composite high schools which provide prevocational, commercial, and homemaking courses, in addition to the regular high school courses. All of these schools, excepting Woodstock, were built at public expense. The vocational school in Saint John was opened in 1926 and cost approximately $500,000, complete. Before the opening of the Saint John school, there were 561 pupils enrolled in day classes and 1,433 in evening classes conducted in 9 municipalities throughout the province. It is expected that the total enrollments will be more than double during the school year ending June 30th, 1927.

Short-term courses for garage workers are conducted at different centres during the winter months and an itinerant instructor conducts short intensive courses in marine engine and automobile troubles in small centres during the summer months. The latter service is for fishermen and car owners who do their own repairing.

QUEBEC

Quebec, the largest province in the Dominion, has an area of 706,834 square miles. The total population in 1921 was 2,361,199 of which 80% is French speaking. Approximately 1,000,000 people live in the City of Montreal and adjoining municipalities. Twelve cities in the province have more than 10,000 inhabitants.

Quebec's system of education is unlike that of any other province. Only the industrial, commercial and applied art branches of vocational education are included in the work on which federal grants are claimed. This work, which was started about 1910, has grown rapidly during the past five years and, since 1923, provincial government expenditures have been more than sufficient to earn the full appropriation under the Technical Education Act.

Two Provincial Schools of Art, in Quebec City and Montreal, were opened in 1922 and 1923 respectively. Over 1,200 pupils are enrolled in day and evening classes in these schools which teach various branches of pure and applied art, including architecture, modelling, poster work, engraving, and decorating.

Commercial education receiving federal grants is confined to certain branches of the work carried on by the School of Higher Commercial Studies, in Montreal. In addition to degree work in commerce, the school provides an extensive evening school programme for office workers and others in commercial life. Correspondence courses were organized by this school in 1924.

A pulp and paper school was established in Three Rivers in 1923. It is operated by the Department of Lands and Forests as a branch of the technical school and provides full-time, part-time and evening courses for workers in the pulp and paper industry. The part-time and evening pupils are employed in local plants.

A provincial school for forest rangers has been in operation at Berthierville since 1924. It also is operated by the Department of Lands and Forests.

A printing school for apprentices and journeymen was established in connection with the Montreal Technical School in 1925. This school is supported by the provincial government but is operated by an advisory council composed of representatives of the printing employees, employers and the provincial government. A similar school for the building trades is under consideration and may be opened during 1927.

The Shawinigan Technical School was built and equipped by a local industry and, although it receives federal and provincial grants, it is supported mainly by the industries which it serves. The schools at Grand Mere and Sherbrooke are taught by religious orders but are open to any boy in these municipalities. The Council of Arts and Manufactures carries on evening classes in 15 municipalities which are recognized as a part of the provincial vocational education programme.

The provincial technical schools, of which there are four, provide instruction for boys and men only and have two types of day courses—a three-year technical course designed to prepare boys for supervisory and junior executive positions in industry, and two year trade courses intended to train competent mechanics. These schools are supported jointly by the provincial and municipal authorities.

Day schools, receiving federal grants, are conducted in 9 municipalities, and evening classes in 21 centres. The total enrollment in day classes during 1926 was 1,985 and in evening classes 7,747.

ONTARIO

Ontario is the second province in size, with an area of 407,262 square miles but it is first in population, having 2,933,662 inhabitants in 1921. There are 25 municipalities in Ontario with populations exceeding 10,000 and three cities of over 100,000 inhabitants. Toronto, the largest city, had a population of 521,893 in 1921.

Vocational education in this province was started in two or three of the larger cities before 1910 and by 1919 the work had become fairly well established. Day classes were operated in eleven cities and evening classes were carried on in 36 municipalities. In 1926, day schools were established in 29 municipalities and evening classes were operated in 55 centres. The enrollments were 19,622 for day schools and 35,226 for evening classes—over half of the enrollments for the whole Dominion.

Ontario's programme of vocational education is the most diversified and highly organized in Canada and is similar to those in the Eastern States and Middle West. Cultural and academic subjects are given first place in vocational schools and no attempt is made to produce skilled workers in any branch of industry. A broad foundational training is aimed at rather than specialized training in any one branch of industrial or commercial life. The schools endeavour to maintain close contact with industry through evening classes, part-time and continuation classes, employment service for graduates, and occupational information. Apprenticeship is encouraged and recently a provincial apprenticeship council for the building trades was established in Toronto.

Teacher-training for day teachers is centralized in the Training College for Technical Teachers, at Hamilton, but the staff of the college give instruction to evening school teachers in various centres, during the winter months.

The provincial College of Art, in Toronto, serves the whole province, while some of the larger technical schools have well organized art departments. Commercial courses in the province vary from two-year courses in the high schools, which are not recognized as vocational, to the five-year courses of the Toronto High School of Commerce. Most vocational commercial courses cover three years' work and are organized as branches of the technical schools.

The larger cities have separate vocational or technical schools but the smaller cities usually organize vocational departments in connection with the other departments of a composite high school. The vocational work is divided into five branches: 1. Technical and industrial, 2. Commercial, 3. Home Economics, 4. Applied art, 5. Agricultural. Federal grants are not paid on the agricultural work.

(*Continued on page forty-one*)

RESEARCH DIVISION

A REVIEW OF A BULLETIN

"A New Conception of Office Practice Based on an Investigation of Actual Office Requirements"

By F. G. NICHOLS, *et al.*

Harvard University Press, Cambridge, Massachusetts. Price 50 cents.

If commercial education is to meet the needs of boys and girls who are preparing for business positions, it must be organized so as to meet the requirements of business. There is an abundance of evidence that almost all commercial education curricula in public high schools and evening schools and in private schools are devoted almost exclusively to instruction in shorthand, bookkeeping, and a few related subjects. The study upon which this bulletin is based has revealed a great many facts regarding office employment and business conditions in general which every commercial educator should know, if he is to offer a brand of business training that will really function in the business experiences of boys and girls. For example, more than 90 per cent of office workers perform non-stenographic duties. Only a fraction of clerical workers are responsible for bookkeeping work of great importance. The great majority of clerical assistants devote their time to a great variety of duties for which present commercial curricula give almost no preparation.

There is a tendency to differentiate commercial curricula in the senior high school with three occupations in mind—stenographer, bookkeeper, and store salesman. These differentiations represent a long step forward in the development of business education but they are inadequate in view of the fact that such a large proportion of office workers are not employed in any one of these three positions.

It is thoroughly established that boys and girls in any school are chiefly distinguished by their individual differences. They do not have the same aptitudes, interests, and abilities. They cannot be prepared successfully for the same kinds of positions. Some are especially adapted to stenographic work. Others will find their greatest opportunity in the bookkeeping field, while still others are natural-born salesmen. But in addition to these three groups there is a still larger group who for one reason or another will obtain clerical positions calling for skill in one or more of the following kinds of office work—filing, calculating machine operating, dictating machine operating, handling merchandise and records concerning it, handling cash and accounting for it, operating the billing machine or bookkeeping machine. Up to the present time almost no attempt has been made to prepare for these duties. In recent studies it has been revealed that only 6 schools out of 123 high schools offer any office practice work and in practically all of these six schools the office practice course is a mere veneer of clerical training given as a part of the stenographic course.

In the belief that there should be in the high school program a clerical curriculum in addition to the three curricula referred to above and that clerical work of a specialized sort should be available in our evening schools, the study reported in this bulletin was made. This study has revealed many facts on the basis of which real clerical training can be organized in schools that are desirous of meeting the requirements of all of their pupils.

Among the more important facts that have been presented on the basis of this study are the following—the distinction between clerical work that is peculiar to certain business offices and that which is common to practically all business offices; the fact that office trades are not well defined outside of those which have to do with bookkeeping and stenographic work; the need for all around clerical training in view of the fact that office managers find it necessary to transfer clerks from one job to another to relieve the monotony of certain types of clerical work and to increase the productivity of such workers; the fact that certain types of office work are done almost exclusively by women while others are largely in the hands of men; the extent to which general and special education are desirable for office work; the kinds of evening school courses that are being taken by office workers, and the kinds of courses which the same office workers would take if they were offered in our evening schools; the very important fact that no longer is it possible for the average office worker to "learn the business" through experience and the equally important fact that general business training for promotional purposes must be a part of every commercial education program; the special personal characteristics that are, in the estimation of office managers, essential for each of the more important office positions; the relative importance of various types of clerical work on a frequency basis; the types of clerical work for which training must be given on the job and the kinds for which training can and should be given in school; the startling fact that there is no great distinction between the quality of clerical work done by those who have had the usual commercial training in our private and public schools and those who have had no such training; and the extent to which each type of office work offers opportunity for promotion.

The above are only a part of the fact content of this bulletin which is based on an analysis of the duties performed by about 6,000 office clerks selected from offices employing a total of 34,000 office workers, and information furnished by 54 office managers who are prominent in the National Association of Office Managers. Offices with but two or three office workers as well as offices that employ hundreds of office workers are included in the study. It is truly representative of requirements of business offices throughout the country.

At the outset in the bulletin are 31 definite conclusions, each with a recommendation as to what should be done in the light of the conclusion drawn. At the end of these conclusions is a proposal for a clerical training curriculum covering a two-year period. Such a curriculum compares favorably with stenographic and bookkeeping training from educational and vocational points of view. The equipment required for this department, the nature of the work to be included in the curriculum, and the cost of the equipment are set forth.

This bulletin should be of great interest to all who wish to evaluate their own commercial education program in the light of actual conditions as they exist in the modern business office and in the light of the fact that in every school, whether it be of the preparatory or extension training type, there are pupils of widely different aptitudes, abilities, and interests.

"The American Home Economics Association through the trustees of the Ellen H. Richards Memorial Fund announces the offer of a graduate fellowship of $500.00 for the year 1927-28. Candidates must hold a bachelor's degree from an approved institution and submit evidence as to personality, scholarship and probable ability in research as attested by three or more statements from references. Candidates must present a brief statement of the proposed problem of research with plans for its development, specifying the institution where the research will be carried on. The Committtee on Award will be glad to consider a proposal for research either immediately in the home economics field, or in a closely related and contributory field such as sociology, economics, child welfare, science or art. Applications should be made in writing on or before April 1, 1927, to the office of the American Home Economics Association, Washington, D. C."

LOG OF THE SHIP

This season's cruise has included the ports of Louisville, Ky., (American Vocational Association); Dallas, Texas, (National Education Association); Philadelphia, Pa., (Eastern Arts Association), and Milwaukee, Wis., (Western Arts Association).

One feature of the stop at the Eastern Arts Association at Philadelphia was a marine dance given by "The Ship" to the delegates in attendance. Admission to this dance was provided by a buttonhole ticket about five inches in diameter showing a model of the "Santa Maria" printed in three colors from linoleum blocks. These tickets as worn by delegates around the meeting rooms and lobbies gave "The Ship" much creditable publicity.

This dance was arranged by a committee composed of Steward William Milliken as chairman, assisted by Fred Gross, Ralph L. Newing, and Waldo C. Wright.

The social activities of "The Ship" were also much in evidence at the Western Arts meeting in Milwaukee.

Chief Wireless Operator Arthur Dean addressed a meeting of industrial arts teachers on April 1st at Minneapolis, Minn.

The present passenger list of "The Ship" is as follows:

Carl T. Cotter, Toledo, Ohio.

Wm. S. McAndrew, Chicago, Ill.

Wm. J. Bogan, Chicago, Ill.

Roy Woolman, Des Moines, Iowa.

L. H. Dennis, Harrisburg, Pa.

At present there is one "pirate" on board. He is Harold A. Allen, Business Manager of the Department of Superintendents of the National Education Association.

During the next few months "The Ship" will be in dry-dock preparing for next season's cruise.

At the Western Arts meeting in Milwaukee, the American Type Founders Company exhibited an inexpensive elementary printing outfit which was of special interest to teachers from smaller communities.

GORDON E. JAMES (Jesse), who represents the American Crayon Company in Indiana and Michigan, has been elected purser of the Ship. This is the organization composed of representatives of commercial firms exhibiting in the school field. Mr. James, a former manual training

and art supervisor, is one of the many American Crayon Company salesmen who have had practical training in educational work before entering the commercial field.

A SUMMER COURSE FOR PRINTING TEACHERS

Teachers of printing who wish to take advanced professional work and printers or manual-training teachers who wish to qualify to teach printing will be interested in the

announcement of the State Summer School at Ocean City, New Jersey, from June 27 to July 30.

This school is conducted by the New Jersey State Board of Education. The courses for printers are as follows: Principles and Practice, Printing I, 60 hours, 2 credits; Teacher Training, Printing, Printing II, 45 hours, 3 credits; Linoleum Block, Printing III, 30 hours, 1 credit; Professional subjects (Psychology, Principles and History of Education), 60 hours, 4 credits. The credits given are full college credits.

The work in printing is under the personal supervision of Frank K. Phillips, Manager of the Education Department of the American Type Founders Company. The printing equipment used is that of the ordinary junior high school, thus furnishing opportunity to printing teachers to become familiar with the actual teaching conditions found in most elementary and junior high schools throughout the country.

Ocean City, located twelve miles from Atlantic City, is one of the most delightful summer resorts along the Atlantic Coast. Living accommodations are reasonable.

Tuition is free to residents of New Jersey. Nominal rates are charged to non-residents.

For further information apply to Frank K. Phillips, Manager, Education Department, American Type Founders Company, 300 Communipaw Avenue, Jersey City, New Jersey.

A Beautiful Building

THIS is a view of the beautiful Studio Court Building at Stanford University, California, designed by Pedro J. Lemos of the American Crayon Company staff. Every exterior line was worked out in cardboard model by him. Fascinating exterior color effects are obtained by the lavish use of especially designed colored tiles made with Petroma. There are also nine especially designed doorways and six fireplaces.

Petroma is a color for cement or plaster manufactured by the American Crayon Company. It is made in ten colors and is used for both exterior and interior decorations.

The building has much of the Old World charm and the attention and interest which it has attracted have been unusual and widespread.

In this building were located the offices of the American Art Aid, a department created by the American Crayon Company for the benefit of art teachers and supervisors and of which Mr. Lemos is the head. Assistance in working out art problems and new ideas and suggestions are given to art teachers free upon application.

Within the last few weeks it has been found necessary to move the American Art Aid offices to different quarters, as the steady stream of visitors which the building attracted encroached to too great an extent upon the time of the directors of this department.

BOOK PUBLISHED ON BENEFITS OF SCHOOL PRINTING

F. C. Lampe, Manager Department of Educational Research, Barnhart Brothers & Spindler, Chicago, Illinois

SERVICE

The greatest pleasure coming to any one is in rendering a service whereby our fellowmen may benefit. To the unselfish no task is too great to that end. Service should be every one's job to perform—especially so in the educational line—the passing along of knowledge. Information valuable to others should be handed out freely so that all may have the benefit of it. In so doing a service is rendered.

A Book of Helpful Information

I feel that I have rendered a distinct service to the school people in preparing my new book, "The School Printing Department," in which the advantages of a course of printing in the school are clearly cited. In this book I have covered the printing subject from every angle—the art department, the journalism department, the print shop itself, and the school as a whole. How well I have succeeded I will leave to those who read my treatise. It is, therefore, informative as to its content.

Besides this material, there are twelve suggestions offered for classes in printing, in which the necessary equipment and materials are mentioned to successfully undertake such a study. Floor plans showing how to place the equipment are included, and there are specimen pages of type faces

borders, brass rule, ornaments, a complete outline course of study which may be used for class work, and pages showing linoleum and parra block printing. The pictures of the equipment with a full explanation are also to be found in the book.

A Book of Artistic Beauty

"The School Printing Department" is a book of 44 pages and cover. The type is all hand set, and its typographic arrangement is a work of art, and one of which I am truly proud. By means of this book I am able to show the wonderful possibilities of the art preservative of all arts—that printing is an art subject and that art should be strongly emphasized by instructors of school printing.

Starting Printing Courses

I am not at all concerned about the kind of a printing outfit that will be selected for a beginning; that is left entirely to the judgment of the superintendent and the vocational director. They know how much money the board will provide for the purpose. But it is important to have a course of printing in the school, and for that reason I have offered twelve suggestions from which to choose—from a very small one to a large outfit. The main thing is to get started with printing.

The equipment recommended in each case was carefully selected, consisting of standard articles—the best for the school print shop. The outfits are well balanced, but they contain essentials only to take care of the number of students specified. There is no overloading, thus keeping the cost at a minimum.

Book Is Free

To those who want to be informed about the benefits of school printing, as well as those who are planning for such a course, but are undecided what equipment should be procured, this book will be a fine help. In its preparation the thought uppermost in my mind has been to render a worthwhile service.

The book is free to those who write for it.

THE SIMPLICITY WOODWORKER

Years ago a mill hand in a woodworking mill had an idea—and the idea was this: to combine several woodworking machines in one, thus making it possible to do the work of a number of machines with an investment in only one, besides saving a great deal of floor space. This idea was worked out, and the SIMPLICITY Woodworker was produced and met with an immediate demand.

In 1922 the manufacture of SIMPLICITY Woodworkers was taken over by Mr. J. D. Pierce. Mr. Pierce brought to the business 30 years of experience in woodworking and metal working plants, including 5 years as operator of a sash and door mill, 5 years as general agent for a screen manufacturer and several years as a manufacturer of screens. He has long been connected with public work in his community and was a school teacher for a considerable period.

He has had wide experience in machine designing, with 15 or 20 patents to his credit in metal and woodworking lines. Since 1922 he has developed the SIMPLICITY Woodworker far beyond its original design, making it a much more valauable machine for manual training departments. The SIMPLICITY, as first built, combined five machines in one; it now combines eight. Formerly it would do twenty different and practical operations; now it does twenty-eight. Every moving part is either enclosed or carefully guarded to prevent accidents.

The SIMPLICITY Woodworker that is being used in hundreds of schools today combines a Saw Table, Jointer, *Practical* Thickness Planer, Borer and Mortiser, Speed Spindle, Band Saw Attachment, Upright Spindle Shaper Attachment, and Lathe Attachment—all in a floor space only 28" by 41".

This machine is an invaluable aid to every manual training teacher and student. It enables the student to advance faster, do better work, and at the same time it teaches him how to operate woodworking machines.

Complete and more detailed information about the SIMPLICITY Woodworker may be obtained by writing the Combination Woodworking Machine Co., 557 West Randolph St., Chicago, Illinois.

AN ANNOUNCEMENT

Which is of especial interest to all users of woodworking machinery is that of the transfer of Mr. Albert H. Jones, who was formerly general superintendent of manufacturing operations at the Rochester division of Yates-American, to superintend manufacturing at the Beloit plant. Mr. Jones took full charge March 1t5h.

It can be said that Mr. Jones comes to the Beloit works of the Yates-American Machine Company with practically a life time of experience in the building of woodworking machinery. He has been connected with woodworking machinery manufacture for twenty-six years, twenty years of which were spent as superintendent of what was formerly the American Woodworking Machinery Company plant at Rochester, N. Y. Mr. Jones entered the business when the demand first became evident for higher speed, more efficient production in all the different phases of woodworking manufacture. Since then there has been no development with which he has not been intimately associated.

In ability and in his understanding of the problems and needs confronting woodworkers, Mr. Jones is the most efficient superintendent in the business today. Several years work in the field on machines under actual operating conditions brought him to know the woodworking tool from the user's standpoint. His wealth of knowledge concerning practically every phase of the industry from the building of the machine to production in the woodworking factory will make his services at Beloit of inestimable value.

Mr. J. L. Furnee, vice-president of the Frank Paxton Lumber Company of Kansas City, Kansas, is an enthusiastic believer in vocational education. During the past few years he has studied the field and has given 100% co-operation to teachers and supervisors in solving their lumber problems. In these days of rapidly mounting costs, the price per foot is an important question. Handling the right kind, properly prepared and in immense quantities this firm is able to put lumber in the school shops in all sections of the country at surprisingly low rates. This has been an eye-opener to many school officials who were sold on the idea that of all school supplies, lumber above all else could be purchased to advantage only in the local market. By the way, the film which they have prepared for school use entitled, "Forest to Consumer," is a splendid aid in teaching students the various processes of preparing lumber for use. Write and ask them to put you on their list to receive it.

A prize of One Hundred Dollars ($100.00) has been offered by the W. M. Welch Scientific Company for the best design of insignia as a national emblem for Vocational Agriculture in the country. This is the outgrowth of the work of the committee on Insignia and its report at the Louisville Convention of the A. V. A. The prize of One Hundred Dollars is offered in order to stimulate the students to suggest the most appropriate design. The rules have not been finally made, but an announcement will undoubtedly be coming from the committee, of which Mr. J. A. Linke of the Federal Board at Washington, D. C. is the Chairman. It is contemplated that each contestant will be asked to submit a brief description with the design, telling the particular significance of the design. It will be interesting to see the outgrowth of the contest as at each of the Regional Conferences there has been a marked divergence of opinion as to the form of design. This has varied from the horseshoe

with the significant V. A. which was submitted and tentatively adopted at the Louisville meeting to the Pennsylvania design, emblematic of a sower with the marginal horn of plenty.

"Education follows the flag," has long been an axiom applied to the United States. The Morgan Vise Company of Chicago, reports that the far-off Hawaiian Islands and Porto Rico are among the recent purchasers of their products. We'll probably hear next of the Eskimos in Alaska using the latest rapid-acting model, when shaping up their walrus tusks into sled runners. Canada is also a heavy purchaser, in spite of a 35% duty.

Any school man interested in earning a little pin money should accept the $100 offer of the Triple Metals Corporation, 107 North Wacker Drive, Chicago. This amount will be given to any one who visits the exhibit booth at the convention and succeeds in opening one of their keyless locks, without knowing the combination. This lock has gained favor and is specified in many installations in both new schools and old, and has solved the locker problem in both shops and gymnasiums. Mr. Full, the president, says the above sum is burning a hole in his pocket, he has carried it to so many conventions, expecting to find a successful taker. Step right up, gentlemen, line forms on the left.

The demonstration set of auger bits which the Irwin Auger Bit Company of Wilmington, *OHIO*, sends to teachers of woodwork on request is certainly a very generous offer. Together with the descriptive matter attached to the exhibit it explains the cutting action of these tools in such a clear way that every boy in the shop has a better understanding and a better respect for this frequently abused tool.

EVOLUTION OF A PORTABLE SANDING MACHINE

The urgent need for a light weight, portable sander has brought about the development of a machine that does all classes of sanding ranging from heavy duty roughing or planing on up through the various grades to the beautiful surfaces repuired in fine cabinet work.

For a number of years various classes of work have been done by different types of sanding machines, each one capable of turning out only one class of work and no one of them being capable of turning out all classes of sanding. These sanding machines have been large, stationary machines and many of them are similar today to the original machines manufactured 25 or 30 years ago.

Some years ago, before the War, a series of experiments were performed on several types of light weight, portable sanding machines. The principle involved, which makes possible the elimination of bulk and heavy weight, is correct cutting speed. Machines of various types were built and different speeds were tested carefully until a machine was evolved which obtained the maximum cutting efficiency as regards speed. To illustrate the use of speed with sandpaper. Consider this. A small boy swinging a hatchet through the air into a piece of wood can get better results than the strongest man holding the hatchet by the blade and by sheer force attempting to gouge or press it into a piece of wood. The same principle is true of the thousands of small grits on a piece of sandpaper. When driven against a piece of wood at the proper cutting speed each little grit functions with maximum efficiency and a far better result is obtained than gouging or pressing the same grits into the wood by the application of force or weight.

The Clarke Sanding Machine Co., the pioneer in this field, began their operations before the War in Dallas, Texas. Because of their rapid progress and a desire to be more centrally located, they removed to Chicago, Ill., several years ago and since that time they have made three separate moves into larger quarters because of the rapid strides and tremendous growth of their business, brought about by the increasing demand for their product. On the first of May they are making another move, this time into a new and large plant at 3815-25 Cortland Street, Chicago, Ill., where they will be able to materially increase their output.

The result of their long experience described partially above is the CLARKE VACUUM PORTABLE SANDER. Schools all over the country are using this light weight, easy to handle machine during the renovating season for taking the scars, scratches, and digs off their desk tops, as well as cleaning up teachers' desks, table tops, counter tops, and doing any old floors which might need re-dressing anywhere in their buildings. At the same time, because the machine adapts itself to all classes of woodwork, it is admirably suited for Manual Training instruction and is giving first-class satisfaction for this work.

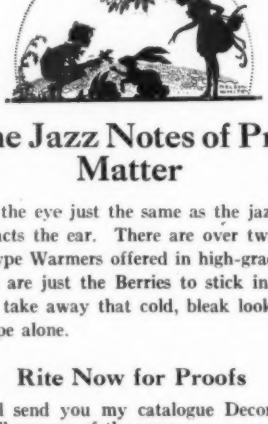
The rapid and yet conservative growth of this company illustrates the words of a great writer to the effect that when a man does something well the world will wear a pathway to his door. This is certainly true of these people. They have gone far and are destined to go much farther.

Activity among the publishers appears to be increasing in many directions. Speaking of publishers brings to mind an announcement of new books just received from the Gregg Publishing Company. It is noted that a number of new books have come from the press in recent months—and more coming. The attractive lineup of titles is as follows:

Rational Bookkeeping and Accounting.
Gregg Shorthand Junior Manual.
New Rational Typewriting, 1927 Edition.
New Rational Typewriting, Intensive Course.
Rational Typewriting Projects.

We understand that sample copies of these publications are available to our readers who contemplate expansion. As in all cases, we presume this applies to regular classroom texts where examinations are made with a view to adoption.

Type Warmers



Are the Jazz Notes of Printed Matter

Attracting the eye just the same as the jazz notes of music attracts the ear. There are over two hundred of these Type Warmers offered in high-grade electrotypes, that are just the Berries to stick in a column of type to take away that cold, bleak look that you have in type alone.

Rite Now for Proofs

Also I will send you my catalogue Decorations De Luxe for all seasons of the year.

COBB SHINN

207-J Fair Bldg., Indianapolis, Ind.

(*Continued from page thirty-five*)

Vocational education has become an important part of the provincial system of education. It is growing rapidly, and fresh developments are taking place every year. Minimum requirements or standards are higher than in any other province and the tendency is to increase them. The total expenditures on all types of secondary vocational education in the province exceeds $4,000,000 annually. During the three-year period from 1920 to 1922 the expenditures on new buildings exceeded $5,000,000 and the building programme has not slackened since. Ontario, each year, earns considerably more than the amount available under the Technical Education Act.

MANITOBA

Manitoba, the fifth province in size, occupies an area of 241,832 square miles. It is fourth in population, having 610,118 inhabitants in 1921. The City of Winnipeg, which had a population of 179,087, is the only large city in the province, there being two other municipalities with more than 10,000 inhabitants.

Vocational education became established in Manitoba in 1912, when two large technical high schools were opened in Winnipeg. These schools provided day and evening classes in commercial work, home economics and general industrial education. The courses were of three years' duration and paralleled the regular high school courses.

By 1919, the work had been started in 5 municipalities. In Brandon, there were day classes in commercial work and home economics, and evening classes for the building trades. In the three other centres, the work was confined to day classes in home economics.

For various reasons, the work in Manitoba has not made progress. The day industrial courses in Winnipeg have become manual training high school courses. Commercial courses are conducted in Winnipeg and in two neighboring municipalities, while evening classes are confined to Winnipeg. Home economics is carried on in Winnipeg only and has become a part of the regular high school work.

The Winnipeg School of Art, which is a private organization, has undertaken certain work for the Department of Education since 1924 and is recognized as a part of the provincial system of vocational education.

The total enrollment in day classes during 1926, was 2,028 and in evening classes 1,301. In addition to these pupils, 26 men were enrolled for correspondence instruction in stationary engineering, a new development which started in 1926.

SASKATCHEWAN

Saskatchewan, the sixth province in order of size, is a purely agricultural province, occupying an area of 251,700 square miles. Its population of 757,510 in 1921 makes it the third largest in this respect. Regina, the capital city, had a population of 34,432 and two other cities had approximately 20,000 inhabitants. The other municipalities had populations of approximately 5,000 or less.

The Vocational Education Act of Saskatchewan was assented to on February 4th, 1920, but, owing to the absence of industry, the development of the work has been very slow and no one has yet been appointed to organize and supervise vocational education throughout the province.

Commercial courses are successfully carried on in four centres and household science is provided in two cities. Industrial work of a general nature is provided in day classes at Regina and evening classes are operated in three cities. The total enrollment in day classes during 1926 was 826 and in evening classes 648.

ALBERTA

Alberta is the fourth province in order of size, having an area of 255,285 square miles. It ranks fifth in order of population with 588,454 inhabitants in 1921. Calgary, its largest city, had a population of 63,305 while Edmonton, the capital city, is approximately the same size and there are two other cities of approximately 10,000 inhabitants.

A good beginning in vocational education had been made by the Province of Alberta before 1919. A prevocational

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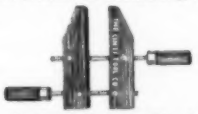

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school in Calgary provided industrial, commercial and home economics courses in grades VII, VIII and IX. A technical school in Edmonton offered four types of work, viz., prevocational, industrial, technical matriculation, and special courses. Commercial schools were operated in three centres and evening classes were conducted in four municipalities.

Plans were completed in 1919 for the erection of the Provincial Institute of Technology and Art, in Calgary, to take the place of the classes which had been carried on, since 1916, in temporary quarters. The new building was completed in 1922 and the work in this institution has grown steadily. A large wing was added to the shop buildings in 1926 and all classes are filled. The work is all of an industrial nature. The Institute provides full-time two-year courses, short-term winter courses, summer courses, and evening courses, for pupils from all parts of the province. It also conducts correspondence courses in stationary engineering and mining. The enrollment in day classes for 1926 was 418, in evening classes 316, and in correspondence courses 154.

Day school work in Alberta, although slightly increased, is still confined to the four cities mentioned above. Evening classes have been operated in as many as 20 different centres, but owing to a period of depression, particularly in the mining districts, the classes have been discontinued in a number of centres. Only six municipalities were carrying on evening classes in 1926, with a total enrollment of 2,725 pupils. The total enrollment in day classes was 1,902.

Conditions have greatly improved during the past year and a revival of the work is anticipated. The small size of the municipalities makes it very difficult to organize the work on a permanent basis and fluctuations are unavoidable. It is hoped to supplement the evening school work by an enlarged programme of correspondence instruction, not only in Alberta but in the whole of Western Canada.

BRITISH COLUMBIA

British Columbia is split up by mountain ranges into a series of valleys and plains, most of which are still virgin country. The province occupies an area of 355,855 square miles, being the largest of the four western provinces. Its population in 1921 was 524,582, the smallest in Western Canada. The bulk of the population is found in and around the three cities of Vancouver, Victoria and New Westminister, situated in the southwest corner of the province. Greater Vancouver has a population of aproximately 200,000.

Vocational education in British Columbia had made a good start prior to 1919 but the greatest period of growth has occurred since 1923. In 1919, day classes were conducted in 8 municipalities with a total enrollment of 990 and evening classes were held in 12 centres, with 2,448 pupils. In 1926, there were 14 municipalities operating day schools with 2,667 pupils and 37 centres carrying on evening classes with a total enrollment of 6,017. The bulk of the day work consists of commercial classes but industrial training is provided in four centres and home economics is carried on in two cities.

Teacher-training is centralized in Vancouver and is provided through summer courses, Saturday classes during the school terms, and correspondence instruction.

Approximately 200 pupils are enrolled in correspondence courses for mine operators, provided by the provincial Department of Education.

An apprenticeship council was formed in Vancouver in 1925 to foster and control the training of young workers in the building trades. A successful beginning has been made in the carpentry trade and all apprentices are required to attend special evening classes at the local technical school.

Arrangements are being made to erect a new technical institute for Greater Vancouver and it is expected that the next few years will witness a decided development in the work along the lines of special programmes for the growing industries of the province.

PROVINCE OF NEW BRUNSWICK

Progress Report, Vocational Education in New Brunswick

During the school year 1926-27 the Vocational Education movement advanced steadily in New Brunswick. Enrollments of course are small as compared with some of the larger Provinces, but steady growth has been made in all departments. Eight day schools are in operation as compared with five during previous years. The total enrollment in day classes is 1,087, which is an increase of 237% over the previous year. Full time day teachers now number fifty-six as compared with thirty last year. The evening schools had an attendance of 1,189 (end of First term, Dec. 926) as compared with 1,763 (end of Second Term, June, 926). Sixty prospective Vocational teachers were in training during whole or part of the year.

NOTE—The enrollment for the Night Classes for Second Term ending June, 1927, is not yet made up.

PROVINCE OF NEW BRUNSWICK

The Saint John Vocational School

The Saint John Vocational School was ready to receive students in September, 1926. It is the largest school in the province and every effort was made by the local committee and the architect to make the building modern and complete. The cost of construction and equipment will be half a million dollars. This school has a magnificent site overlooking the Harbour from the front and the Reversing Falls from the rear. The auditorium, seating 800, together with the stage gymnasium, the dressing rooms, showers and swimming pool, offer splendid opportunity for a physical education program.

The shop wing, which is of modern factory construction, is so built that it can be adjusted to the changing needs of the future without interfering with any structural features.

The Institution, when in full operation, will include the following departments or schools:

a. Prevocational or Junior High School for boys and girls who have not passed the high school entrance.

b. Industrial High School for boys who are planning to enter directly upon industry after completing their secondary education.

c. Practical Arts High School for girls who are planning to enter nursing, home economics teaching, or dietetics, as well as for those who desire a thoroughly practical training in the art of home-making.

d. The High School of Commerce for those boys and girls who are planning to enter the business world after leaving high school.

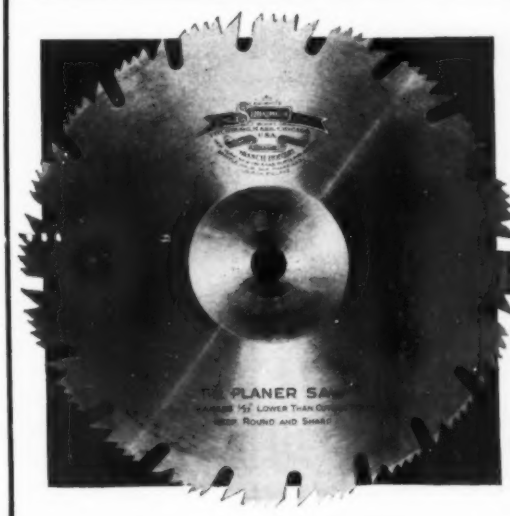
e. The school of fine and applied arts for those possessing marked artistic talents.

f. The school of navigation and fisheries for those who are looking forward to a sea-faring life.

g. The technical high school which will prepare boys to enter upon science and engineering university courses.

A Technical School was started in Edmonton fourteen years ago. The organizer was W. L. Richardson, M. A., Ph. D., now Head of the Department of Education of Butler University, Indianapolis.

At first besides the general technical classes manuar training instruction was given quite extensively to high school students. But as the need for trade training became more pressing the school ceased gradually to do this type of work. The demand for mechanics capable of repairing tractors and automobiles led to the establishing of an automotive department in which nothing but trade instruction was given. Similarly other departments were started with a like purpose,



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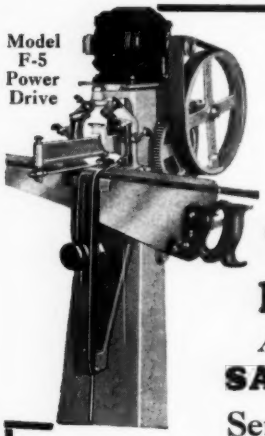

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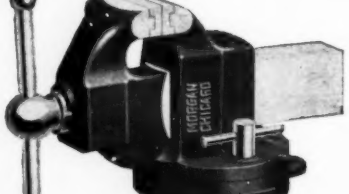

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and those which had been long in existence, gradually abandoned manual training and reorganized for trade training. For almost four years the school has been devoted exclusively to regular vocational instruction or to that type of training which is definitely preparatory to it.

The departments of the school include Automotive, Electrical, Machine, Forging and Smithing, Woodwork, Draughting, Dressmaking, Household Economics, Applied Art, and Related Subjects. There is a Printing Department but it is not being operated at present. The courses extend over three years of full time day school work. The first year is spent on prevocational training and the last two on regular trade training. On completion graduates are in demand for employment by local firms and by the Canadian National Railway at the West Edmonton Shops.

Full Time Day School Instruction completely taxes present accommodations and Part Time Instruction is limited to Home Economics.

The evening classes are well patronized. The total number of persons enrolled has in recent years reached a total of 1,400. Instruction is given in over thirty subjects.

The citizens of Edmonton are interested in the school and it receives excellent support.

P. S. Bailey,
Principal Edmonton Tech School.

OUR SHARE OF THE VOCATIONAL WORK—VICTORIA PREVOCATIONAL SCHOOL, CALGARY

Our Prevocational School, with a staff of ten and an enrollment of something over 200, combines practical industrial work of several types with the ordinary school work of senior public school and junior high school. The boys spend half of their school time in Printing, Woodwork, Blacksmith and Sheet Metal Work, Leatherwork of several kinds and Drafting, while the girls work at Sewing, Millinery, Household Science, Typing, Shorthand, and Business Arithmetic and English. The aims of the school are to help in the all round development of the boys and girls by providing broader and livelier experience, to give them a more definite idea of the requirements of work along various lines, and thus to give them a better introduction to the life they must enter on leaving school. By studying the progress and capacity of the pupil and the requirements of employers, the school has also been able to be of service in placing both boys and girls in congenial and permanent positions. The school aims to benefit boys and girls both culturally and vocationally: culturally, through its wider appeal, its added interest, and its greater expressional opportunities; vocationally, by its practical touch with the elements of industry and business and by its discovery of the aptitudes of boys and girls.

F. Speakman, Principal,
Calgary Prevocational School.

The year 1926-27 has been an interesting one in some ways in the Province of Alberta.

As a result of an International Conference each of the four Western Provinces in Canada is co-operating in organizing detailed evening instructional courses. Each Province is working out four courses for interchange and use by the others. The result will be sixteen different courses for use for the whole territory.

The Provincial Institute of Technology and Art increased its enrollment from 880 to 1,300. There were corresponding increases in the Prevocational School in Calgary and in the Edmonton Technical School. In the latter school quite a distinct change is taking place in which the academic work is falling off at the expense of more practical shop courses. This is a wholesome tendency in the evening schools in Calgary, Edmonton, Medicine Hat and Lethbridge.

Progressive classes have been conducted. In the Technical Institute, 28 groups met regularly from October to the end of March. Attendance in these groups ranged from 10 to 46. The total enrollment was 523 exclusive of any service for women or any general academic work.

The important outlook in the mining communities is resulting in a larger interest in educational programs for mining towns. The prospects of a material increase in these respects are bright.

W. S. CARPENTER.

AMERICAN HOME ECONOMICS ASSOCIATION MEETING

The twentieth annual meeting of the American Home Economics Association is to be held in Asheville, North Carolina, June 21 to June 24, 1927. For preliminary program, write to Lita Bate, President of the American Home Economics Association, University of Wisconsin, Madison, Wisconsin.

A. V. A. COMMITTEEMAN A GEORGIA CONVENTION SPEAKER

R. L. Cooley, Director of Vocational Education in Milwaukee, Wisconsin, and a member of the executive committee of the American Vocational Association, will be the principal speaker at the annual meeting of the State Teachers' Association of Georgia this year.

WYOMING

(*Continued from page thirty-two*)

A superintendent of a coal company and at that time president of the school board was mainly responsible for the beginning of the vocational education program. His idea was to train the student to do both mechanical and electrical work thereby increasing his usefulness around the mine. It is gratifying to know that his efforts have been rewarded by the present scope of the work.

CHAS. F. CAMERON.

NEW DEVELOPMENTS IN TRADE AND INDUSTRIAL EDUCATION IN WYOMING

A new school car for training railroad engineers, firemen and engine maintenance men has just been started in Wyoming.

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Plans are nearly completed for the organization of a cooperative part-time nurse training school. The school will give the nurse an opportunity, if the work as outlined is completed, to graduate from high school and the hospital nurse training course at the same time.

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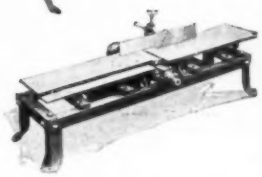

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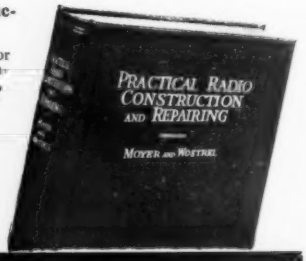

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